



ESTABLISHED 1858.

PRINCIPAL OFFICE, 42 CANNON STREET, LONDON, E.C.

BRANCH OFFICE:

NORMANBY CHAMBERS, MELBOURNE.

Published every Saturday.

Subscription 10s. per year, payable in advance;
commencing from any date.

Post free to every country in the world. Single copies, 4d. each.

Supplied only to persons connected with the Trade.

For Australasian subscribers the subsidiary journal THE CHEMIST AND DRUGGIST OF AUSTRALASIA is included.

Literary Contents.

PAGE	PAGE
Bankruptcy Reports	815
Correspondence:—	
Liq. Perri Hypophos. Co.;	
Indian Ipecacuanha; The	
Irish Pharmacy Act	820
The Ulster Potters and the	
Dublin Clay	821
A Waterproof Varnish; Che-	
mists and Aërated Waters;	
Miscellaneous Inquiries ..	822
Dispensing Notes	823
Legal Queries	824
Editorial Notes:—	
Materia Medica Notes	806
Using Doctors' Names	807
Infection and Disinfection ..	808
Glass Bottle Making by Ma-	
chinery	809
Genesis of a Remedy (Illus-	
trated)	816
French Pharmaceutical News..	805
Leaderettes	811
Legal Reports	796
Metropolitan Reports	792
New Companies	815
Obituary	817
Personalities	817
Pharmaceutical Society of	
Great Britain:—	
Examination Results; North	
British Branch, Papers by	
Messrs. Gibson, Boa, and	
Hill	812
Provincial Reports	792
Sheffield Pharmaceutical and	
Chemical Society	814
Trade Notes	817
Trade Report:—	
Mining Lane	818
American Markets	819

ALWAYS PROGRESSING.

WE have pleasure in announcing that we have just concluded a contract with the Council of the South African Pharmaceutical Association, whereby THE CHEMIST AND DRUGGIST will be regularly supplied to every member of that body. The pharmaceutical societies, every individual member of which is now supplied in this way, are—

The Pharmaceutical Society of New South Wales,
" " " Queensland,
" " " South Australia,
Two pharmaceutical associations in Tasmania,
and
The South African Pharmaceutical Association.

PROFESSOR EDGAR CROOKSHANK, of King's College, has, on behalf of the agricultural department of the Privy Council, investigated the so-called "Hendon Cow disease," and has come to the conclusion that the disease of the teats of the cattle was the true Jennerian cowpox. He proposes that animals suffering from the disease should be carefully isolated, and is continuing the investigation with the object of ascertaining if the matter may be used for vaccination purposes.

ADVERTISEMENTS of employers and assistants can be received by us up to the first post on Friday mornings, and will be inserted in the current week's issue.

SOUTH LONDON SCHOOL OF PHARMACY (LIMITED).—This company is formed to carry on the business of providing facilities for teaching all branches of science, the art of pharmacy, and all other branches of education in any way connected therewith, and to acquire the business of a school of pharmacy now carried on by Dr. John Muter at 325 Kennington Road, London, together with the goodwill and all real and personal property and liability in relation thereto. Also with power to acquire any similar business; to take any land, &c., required; to publish books, &c., bearing on the subjects taught; to appoint professors or others; to deal in drugs, chemicals, or apparatus; to provide for the boarding and lodging of students; and to do other things incidental or conducive to the attainment of the objects of the company. Capital, 5,500*l.* in 1,100 shares of 5*l.* each, of which 500 are preference shares entitled to a first charge on the profits of the company to the extent of 6 per cent. per annum, the remaining 600, or B shares, to be entitled to the rest of the profits. The first subscribers are:—John Muter, 397 Kennington Road, analyst; Henry Williams Bailey, 285 Kennington Road, gentleman; Wm. Baxter, 285 Kennington Road, secretary; Wm. Hy. Dodd, 8 Kempson Road, Fulham, teacher of pharmacy; Robert Gent-Davis, M.P., 19 Albert Square, Clapham; Charles Archibald Mitchell, 16 Titchfield Terrace, St. John's Wood, chemist; Hy. Preston, 7 Grand Hotel Buildings, Charing Cross, pharmaceutical chemist. The first directors are Messrs. Muter, Bailey, Baxter, Mitchell, and Dodd, and of these Messrs. Muter and Baxter are appointed the first managing directors, and are not removable otherwise than by resignation or by special resolution. Dr. Muter is to have four rooms on the second floor of the company's premises, with coals, gas, chemicals, and attendance in lieu of a money salary, wherein to conduct his private business as an analytical chemist, or failing such provision, he is to have a salary of not less than 100*l.* per annum, and Mr. Baxter is to be entitled to a salary of 50*l.* per annum.

Gazette.

THE BANKRUPTCY ACT, 1883.

RECEIVING ORDERS.

DEACON, HENRY PELHAM, Willesden Lane, surgeon.

DENMAN, FRANCIS PHILIP, Burdett Road, Limehouse, Bow Common Lane, and Duckett Street, Mile End Road (formerly of Edinburgh, Glasgow, Paulet Road, Brixton, and Elgin Crescent, Bayswater), physician, surgeon, and accoucheur.

ADJUDICATIONS.

FAWCETT, JAMES WILLAN (trading as J. Lawrie & Co.) Leeds, mineral-water manufacturer.

GOODMAN, ZACHARIAH WALTER, Barking, Essex, soap-maker.

MARR, DAVID, High Holborn, surgical instrument maker.

NOTICES OF DIVIDENDS.

MERCER, ALFRED, Lutterworth, surgeon's assistant. First and final div. of 6½*d.*, December 19 and 28, Friar Lane, Leicester.

WILCOX, HENRY (trading as R. Lake & Co.), Plymouth, aërated-water and syrup manufacturer. Final div. of 1s. 3*d.*, December 28, 2 Courtney Street, Plymouth.

ORDER MADE ON APPLICATION FOR DISCHARGE.

BRADBURY, SAMUEL WILLIAM, New Oxford Street (late of Philip Lane, E.C., and Walton-on-Thames, Llandoverly, South Wales, and Birkenhead), commercial traveller (late licensed victualler, and formerly sheep-dip manufacturer). Discharge suspended for three months.

SCOTCH SEQUESTRATION.

RANNIE, C. J., & Co., drysalts, 105 Virginia Place, Glasgow. Creditors met in the Faculty Hall, St. George's Place Glasgow, December 23, at 12 o'clock.

Metropolitan Reports.

LAUDANUM.—On December 16 Elizabeth Stevens, forty, was charged, at the Southwark Police Court, with attempting to commit suicide by taking laudanum. The prisoner had been found in a first-class waiting-room at Waterloo Station, apparently ill. On being questioned she confessed that she had taken laudanum. She was taken to the hospital and successfully treated. Prisoner now stated that she suffered from sciatica. She was dismissed on giving a surety of 40*l.* for her good behaviour.

POISONING CASES.—On Monday evening Maude Beattie, twenty-three, a nurse, while in Trafalgar Square swallowed a quantity of tincture of iodine, with suicidal intent. She was taken to Charing Cross Hospital, where she recovered.—Dr. Diplock held an inquest at Kilburn, on Tuesday, regarding the death of Henry J. Roberts, a clerk. Deceased was in the habit of taking laudanum, and on the Friday previous he took too much, and died at 1 A.M. on Saturday morning. Verdict accordingly.

DRUGGISTS' SMOKING CONCERT.—A number of the employes and friends of the firm of Messrs. Baiss Brothers & Co. met one evening last week for a cheerful and social evening. Mr. S. C. Welch occupied the chair, Mr. Frank Welch engineered the piano, and Mr. Morris performed on the violin. Songs were contributed by the chairman, and by Messrs J. Lloyd, Garson, Tew, F. C. Stephens, S. Cumberland, E. J. Reid, C. Evans, H. Standring, Quinn, F. Goodall, and T. Sleet. During the evening the harmony was interrupted for a brief period while Messrs. J. G. Dear and T. Sleet contributed a few well-meant but somewhat unscientific rounds with the gloves.

ATTEMPTING TO POISON.—At the Central Criminal Court on December 16, before Mr. Justice Stephen, Mary Ann Mulroy, thirty, was charged with feloniously administering a quantity of poison, viz. phosphorus, to her infant, with intent to murder it. The details of the case will be found in our issue of November 26. The prisoner (a domestic servant) had recently been confined, and when the child was three weeks old she administered phosphorus paste to it and left it in an area. The child recovered. The jury found the prisoner guilty of administering the poison with intent to injure the child, and acquitted her upon the counts in the indictment charging her with an intent to murder. Mr. Justice Stephen sentenced her to three months' hard labour.

Provincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor, will much oblige.

BIRMINGHAM.

THE MIDLAND COUNTIES CHEMISTS' ASSOCIATION.—The ordinary monthly meeting of the Association will be held at the Grand Hotel on December 29, and will partake of a social character.

POISONING WITH NITRIC ACID.—On December 15, John Buckingham, a married man, was admitted to the General Hospital, suffering from the effects of nitric-acid poisoning. He was in rather a precarious condition, but gradually recovered under the treatment.

MEMORIALS OF PRIESTLY.—Last Saturday the Sociological Section of the Natural History and Microscopical Society had an interesting exhibition of relics of Priestly, which they inspected after a visit to places associated with him. Subsequently the Rev. Dr. Crosskey delivered an address on the old philosopher.

TYPHOID FEVER.—The malady, in a virulent form, has broken out at Cradley Heath. Fifteen persons have been attacked, and four deaths have occurred. The outbreak is traced to the use of contaminated well-water, filthy and uncovered ashpits, and a general want of cleanliness amongst a number of the people of the district.

DEATH IN A CHEMIST'S SHOP.—On Monday an old porter named Taylor, feeling ill, went into the shop of Mr. Grieves, chemist, Spinal Street, and asked for a draught for indigestion. While Mr. Grieves was making up a draught Taylor dropped on the floor unconscious. Mr. Grieves endeavoured to restore him, but death quickly ensued, *angina pectoris* being the immediate cause.

INFRINGEMENTS OF THE STAMP ACT.—As recently reported the Inland Revenue authorities have been very vigilant in enforcing the provisions of the Stamp Act in Birmingham. They have made numerous purchases from chemists of proprietary medicines, and after having issued the usual formal letters, have, where the Act has been disregarded, inflicted penalties ranging from a sovereign to fifty shillings.

CHRISTMAS HOLIDAYS FOR CHEMISTS' ASSISTANTS.—Although the movement initiated by Messrs. Dale & Plant, of Smallbrook Street, with the object of giving chemists and druggists' assistants a holiday the two days following Christmas day has not been carried out on any organised basis, it is understood that the great majority of the shops will be closed. The general opinion amongst chemists is that no inconvenience to the public will be occasioned thereby.

THE CHEMISTS' BALL.—A meeting of the Council of the Midland Counties Chemists' Association was held on Friday, December 16, to make arrangements for the chemists' annual ball. A proposal was made that this year the gathering should take place at the Edgbaston Assembly Rooms, instead of at the Town Hall, as heretofore, on the ground that the room was more suitable to the holding of a ball. After considerable discussion it was decided to again utilise the Town Hall for the purpose, that building being more central and easy of access for visitors from the outlying districts. Chemists generally are heartily welcomed to take part in the dance.

ABSENT MEDICAL WITNESSES.—In a case which came before the Burslem County Court on Monday, three medical gentlemen who were to be called as witnesses failed to put in an appearance. Two of them—Dr. R. C. Lynam, house-physician of the North Staffordshire Infirmary, and Dr. O'Hanlan, of Berry Hill—had been served with subpoenas. The judge said the medical man who had not been subpoenaed could not be dealt with for non-attendance. The other two would each be fined 10*l.* Dr. O'Hanlan subsequently putting in an appearance, the judge directed that the fine in his case should not be enforced.

MORPHIA-POISONING.—Richard Hughes, a young man of twenty-five, and a commercial traveller, whom Eros had wounded too deeply, sought consolation in Morpheus. On Friday evening, December 16, a policeman found him lying in Rann Street, Ladywood, frothing at the mouth and in altogether a desperate condition. He was taken to the General Hospital, where he confessed that he had taken a poisonous dose of morphia. After his recovery he was, on Monday, taken before the magistrate, and it came out in evidence that Richard had threatened to kill himself, but he now confessed that he was himself again, and was liberated with a caution.

QUEER CUSTOMERS.—One of our Birmingham brethren who has a large shop in that part called Deritend had a strange customer a few days ago. He was in the backshop for a moment, and on returning he found a huge bull in his shop, surveying the numerous articles around. After his inspection, which it is said was very close, the animal quietly left without doing any damage whatever. The proprietor is not unaccustomed to these unwelcome visitors, for he has had calls during the last few months from a cow, pig, sheep, and two or three lots of poultry. It is reported that the pharmacien is a successful veterinary practitioner.

HEATING BY CONVECTION.—There is being exhibited in Bull Street a new kind of heating apparatus, the principle of which is somewhat novel. It consists of a horizontal cylindrical iron tube containing water, which is heated by a row of air-gas jets, the steam thus generated is made to pass through encased pipes situated above the heating tube, and it is supposed to heat the room by convection. There is provision made for the outlet of the products of the combustion of the gas, and it is intended to be put in any part of a room. The apparatus is called the Backer's patent heater.

ACTION AGAINST A WHOLESALE DRUGGIST—50% DAMAGES.—At the County Court on Wednesday, before Judge Chalmers, and a jury, an action was brought by Joseph Sims, of Brookfields, Birmingham, against Richard Brown, of Spring Hill, Birmingham, wholesale druggist, to recover 50% damages for assault and wrongful imprisonment. Mr. Tanner, solicitor, appeared for the plaintiff, and Mr. Alfred Young, barrister, for the defendant. Plaintiff claimed 25% for wrongful imprisonment and assault, and 25% for illegally searching his house without a warrant. He had been in the employment of the defendant for nine years as carter, his wages being 22s. a week. On July 2 last, the defendant and two detectives stopped the cart as plaintiff was leaving the warehouse and checked the goods in the vehicle with the invoices which had been handed to plaintiff. The detectives found certain goods for which plaintiff had no invoice—a 6-gallon tin of petroleum oil, 1 quart of hair oil, 1 dozen packets of furniture paste, and 1 dozen packets of borax. Mr. Brown thereupon gave Sims into custody on a charge of stealing these articles. It was the duty of the plaintiff to fetch the goods from the warehouse and put them in the cart after they had been checked over with the invoices by Miss Brown and entered in the books. The goods which the plaintiff was charged with stealing ought not to have been in the cart, but they were placed there merely by mistake. Plaintiff was locked up, taken before the magistrates, committed to the Assizes, where he was tried and acquitted. His house was searched by the detectives who arrested him, without a warrant having been obtained from the magistrates. In his evidence plaintiff stated that the goods which he had to deliver each journey were placed on a counter to be checked with the invoices by Miss Brown. He took them from the counter and placed them on the floor as they were checked off. He then took them to the cart and received the invoices. The petroleum was kept in the yard. He had to deliver a 6-gallon tin and a 24-gallon tin that day, also hair oil. Sometimes he put small articles in his pocket. When the cart was stopped Mr. Brown said he wanted to search it. Plaintiff replied, "If there are no invoices for some of the things it is a mistake, the same as before." Mr. Brown had not said what he wanted to search for. There were about thirty-one invoices, which were checked with the goods in the cart. When the articles which he was charged with stealing were found he was at once given into custody. At the lock-up he was searched, and a box of Whelpton's pills found in his pocket. He had put them there for safety. It had cost him 20% to defend himself. In cross-examination plaintiff gave reasons for denying that he could take goods which were not invoiced without being observed. He had not stated at the police station that the Whelpton's pills were his own, bought by his wife; that remark applied to other pills found at his house. Three or four bottles found at his house he admitted were similar to bottles used by Mr. Brown, and that several of them bore Mr. Brown's labels or were stamped with his name, but he swore that he or his wife had purchased them with their contents. He went to a public-house called the "Coach and Horses" when he wanted beer. He did not play cards or bet there. A jurymen complained of this line of examination, and Mr. Young retorted that he was sorry one of the jurymen should have made up his mind before having heard all the evidence. Plaintiff went on to say that when the cart was stopped he said, "If there is anything in the cart not accounted for, it is a mistake, the same as before, and will be returned." When cash was not paid for the goods on delivery he took the receipted invoice back to the office. Mr. Follows, a traveller in the employment of Mr. Brown, was called, and stated that he had taken orders on July 1 for six gallons petroleum and one quart of hair oil. Mr. Young: I admit that orders had been obtained for the petroleum, hair oil, and borax. Witness stated that he had made out invoices for these articles and they ought to have been delivered on the 2nd. Cross-examined: He thought the plaintiff would not have any difficulty in removing goods unobserved from the warehouse to the cart. Mrs. Sims, plaintiff's wife, was then called, and gave evidence as to the search of the house. Mr. Brown and a detective searched the house. She denied that she told them they might come in, and welcome. Some further evidence as to the plaintiff's possession of the bottles having been given, Mr. Young

opened the case for the defence, which was a justification of the course the defendant had taken in giving the plaintiff into custody, and an allegation that the plaintiff had abstracted invoices before they had been checked, and destroyed them with the view of taking out the goods to which they related, selling them and pocketing the proceeds. Defendant gave evidence to the effect that the plaintiff would have no difficulty in removing the goods from the warehouse to the cart unobserved. On July 1 his suspicions were aroused by something which his daughter told him, and he communicated with the detectives. When the plaintiff was asked to account for the articles in the cart for which he held no invoice plaintiff said that Follows, the traveller, had told him they had been ordered. He gave the plaintiff into custody, and went to search his house. When he informed Mrs. Sims of the object of the visit she told him and the detective accompanying him to "Come in and look, and welcome." Miss Brown gave corroborative evidence as to the ease with which goods could have been abstracted by the plaintiff. She stated that she had some time before July 2 observed Sims on two occasions put an invoice behind his apron, but had not made any remark about it. On July 1 she saw in the cart a gross of matches which had not been ordered or checked, and told her father of it. Detectives Baker and Ashby also gave evidence. The latter admitted that if Mrs. Sims had not welcomed the search, he would probably have searched without her consent. He did not know that it was illegal to search the house of a man who was in custody without a search warrant. The Judge, in summing up, said the remark of Sims as to the goods having been found in the cart being put there by mistake might have been occasioned by his observing the detectives take out goods for which they could not find an invoice, or it might have been made because of his guilty knowledge. The plaintiff had offered no explanation of how the goods got into the cart when there was no invoice for them and they had not been checked over. He left the jury to consider whether the plaintiff had put the goods in the cart honestly but mistakenly, or whether he put them in feloniously; or whether if they thought the plaintiff had put them there honestly the defendant had acted reasonably and fairly in giving him into custody with the knowledge he then possessed. The jury returned a verdict for the plaintiff for the full amount claimed. On the application of Mr. Young, execution was stayed for twenty-one days to allow time to move for a new trial.

CARDIFF.

THE CHEMIST NOT TO BLAME—An adjourned inquest was held at Cardiff on Saturday, December 17, regarding the death of Edith May Vanstone, nineteen months. The mother of the child, in her evidence, stated that her son Arthur was employed by Mr. William N. Williams, chemist, 70 Bute Street, at 4s. a week. Mr. Williams attended the child, and, she alleged, refused to pay the boy his wages on the previous Saturday, saying that witness was in his debt. Mr. Williams came and paid the wages on the Thursday, but said nothing about payment for attendance on the child. Mr. Williams was then examined. He said that at Mrs. Vanstone's request he went to see her child on December 9, and provided a simple remedy for chest affections. He believed the ailment was congestion of the lungs. He saw Mrs. Vanstone on Monday to tell her to see the parish doctor, and again on Thursday, when he paid the boy's wages. On Wednesday he sent the boy to the relieving officer, but young Vanstone did not return until Thursday, when the child was dead. It was quite untrue that he said Mrs. Vanstone was indebted to him for a greater amount than the sum he owed her. The Coroner then summed up, and said that Mr. Williams had evidently acted out of charity in seeing the child, and there was not the slightest blame to be attached to him. Verdict: "Death from natural causes, no blame being attached to Mr. Williams."

CLIFTON.

LAUDANUM AND THE ROPE.—Late on Sunday night or early on Monday morning a lady named Miss Cooper Black, thirty, who had been residing for about a month at No. 1 Arlington Villas, Clifton, swallowed a quantity of laudanum

and then hanged herself by means of the bell-rope. Her dead body was found next morning, and an inquest was held on Tuesday.

CORK.

DR. CROSS was on Saturday last, at the Cork Assizes, found guilty of the murder of his wife by the administration of arsenic, and was sentenced to death. He will be hanged on January 10.

DOVER.

MILK ADULTERATION.—At the Dover Division of the Wingham Petty Sessions, on December 15, Samuel Heady Capp, a dairyman, was summoned for selling a quantity of milk which, according to the county analyst, contained 5 per cent. of added water. For the defence it was stated that the milk had been analysed by Mr. J. F. Brown, pharmaceutical chemist, of Dover, and found to contain 11 per cent. of solids (fat 3 per cent.; solids other than fat, 8 per cent.). Mr. Brown was of opinion that the deficiency in the non-fatty solids arose from fermentation, twenty-five days having elapsed between the taking of the sample and its being analysed by him. In consequence of this opinion the bench decided to send the reserve sample to Somerset House, and the case was adjourned for a month to wait the decision.

GREAT YARMOUTH.

ATTEMPT TO POISON WITH PRECIPITATE POWDER.—At the Police Court on December 16, Esther Bacon, a charwoman, was charged with attempting to commit suicide, and to poison her children (fourteen, nine, and seven respectively) by administering precipitate powder. Prisoner was in poor circumstances. Her husband had deserted her; then she took up with another man, who followed the husband's example. She became desperate, and resorted to the popular parasiticide, but it did not prove sufficiently powerful, the sufferings having only been temporary.

LEICESTER.

LEICESTER AND LEICESTERSHIRE CHEMISTS' ASSOCIATION.—The annual dinner of this association was held at the George Hotel on Thursday, December 16. Councillor J. G. F. Richardson, J.P., president, in the chair, Mr. Young acting as vice-chairman. There was a splendid attendance, and after dinner Mr. W. Clark, in fitting terms, proposed "The Pharmaceutical Society of Great Britain." The Chairman, in replying, said that the efforts of the society had always been to further trade interests and ensure the safety of the public. He strongly objected to companies of unqualified persons being allowed to do in pharmacy what a single person could not do, and hoped that before long—as soon as the Irish question was settled—(Laughter)—a new Act would be passed, and pharmacy take its proper place as a scientific business. (Applause.) Mr. Thurlby submitted "The Leicester and Leicestershire Chemists' Association," and referred to the satisfactory progress which had been made in educational matters by the association under the guidance of Mr. Burford. He hoped that by-and-by their students would be able to go straight from Leicester to the examination-room. Mr. J. Edwards (hon. sec.) replied. Mr. Woolley gave "The Town and Trade of Leicester," to which the Vice-Chairman responded in a facetious speech. Other toasts followed, and, in responding to the toast of his own health, the President expressed a hope that the pharmaceutical classes of the association would continue to flourish. With a view of promoting this object he offered 5*l.* per annum to be distributed in prizes, and he hoped by personal effort to considerably increase this modest nucleus by other subscriptions.

LITTLEOVER, DERBY.

AN OVERDOSE OF CHLORODYNE.—Mr. Coroner Whiston held an inquest at Derby on December 16, touching the death of William Wallace Ratcliffe, aged twenty-one, a clerk. On December 12 he went to his mother's house at Littleover,

and at that time he was suffering from measles. At his request his mother procured him some chlorodyne. On Wednesday she found that he had partaken of too large a dose, having drunk it out of a bottle, and death ensued. Mr. Fletcher, surgeon, Burton Road, said that about $\frac{1}{2}$ oz. of chlorodyne had been consumed. That quantity was sufficient to cause death in twelve hours. The usual verdict was returned.

LIVERPOOL.

SPIRIT OF NITROUS ETHER PROSECUTION.—At the Police Court on Wednesday William Budden, chemist, 399 Stanley Road, was charged before Mr. Raffles for selling on November 30 a drug which was not of the nature, substance, and quality of the article demanded by the purchaser. Mr. Marks prosecuted, and Mr. Bremner appeared for the defendant. It was admitted that the defendant's manager sold sixpennyworth of spirit of nitrous ether which Dr. Campbell Brown, the city analyst, certified to be almost completely decomposed by keeping, and contained only a trace of nitrous ether. Mr. Bremner said that the defendant was not aware that the strength of the drug had deteriorated. As this was the first case of the kind, he suggested that a nominal penalty would be sufficient. A fine of 5*s.* and costs was imposed.

A MINERAL-WATERS DISPUTE.—At the Liverpool County Court on December 15, Messrs. Cockroft & Sons, mineral-water manufacturers, Birkenhead, sued Mr. Ronald Macdougall, late proprietor of the New Brighton Palace, for 25*l.* 8*s.*, for 792 dozen of mineral water supplied. There was a counter-claim for 25*l.* for loss of business in consequence of the article supplied not being of a reasonably marketable quality. It was stated by the defendant that the waters supplied contained dead flies and bits of straw. He paid 8*d.* a dozen for large bottles and sold them at 3*d.* each. Of the 792 dozen supplied, 133 dozen had been sold. In reply, the plaintiffs stated that no complaint was made until the defendant was pressed for payment, and witnesses were called who stated that the bulk of the stock left was of good quality, and that if any of the bottles were not saleable they should have been returned and exchanged according to the custom of the trade. Whilst the witnesses were being examined the jury stopped the case, and gave a verdict for the plaintiffs for the full amount claimed.

MANCHESTER.

MANCHESTER PHARMACY STUDENTS' ASSOCIATION.—A smoking concert of members and their friends was held in the Blackfriars Hotel, on the evening of December 15. Over fifty gentlemen were present and the meeting was a great success.

FIRE AT A CHEMICAL-WORKS.—Early on Monday morning last a fire broke out in the centre compartment of the works of Messrs. Levinstein, chemical manufacturers, situated at Crumpsall Vale, near Manchester, and the workmen, with the help of the fire-brigade, got it under in the course of an hour. The compartment in which the fire broke out was seriously damaged. The origin of the outbreak is unknown.

BROWN v. CUMMINS.—The Vice-Chancellor in the Chancery Court of Lancaster (Sir H. F. Bristowe, Q.C.) has given his decision in the above case, which was a suit for imitation of the trade-mark of Jewsbury & Brown's soda-water. The defendant had submitted to an injunction and decree, and the only question reserved was one of costs. The Vice-Chancellor has since issued the following note:—"Having carefully read and considered the affidavits filed in this action, and the exhibits therein referred to, I do order and adjudge that the defendant do pay to the plaintiff his costs of this action, as between party and party, such costs to be taxed."

DEATH OF PROFESSOR BALFOUR STEWART.—By the sudden death of Professor Balfour Stewart, Manchester has been deprived of one of its best-known and most esteemed citizens. Although, of course, Professor Stewart's work, so far as this district is more immediately concerned, lay chiefly in the Owens College, yet he had a comparatively wide circle of friends by whom he was not more esteemed for his intellectual qualifications than he was beloved for his uniform kindness and sympathy in every relation of life. He was

engaged in his ordinary labours at the college on Friday last, being then apparently in his wonted health, and he left Manchester on the evening of that day for Ireland, intending to spend the Christmas holiday with his wife and family at Ballymagarney, Balrath, county Meath. On Monday afternoon his son, who was remaining in Manchester, received a telegram stating that his father was dead. Professor Stewart was born at Edinburgh in November, 1828, and was educated at St. Andrews and the University of his native city.

THE LATE MR. T. G. RICHMOND.—The death is announced of Mr. Thomas Goodier Richmond, F.R.C.S.L., of Manchester. The deceased gentleman was the elder son of Mr. Richard Richmond, the head of the firm of Richmond & White, manufacturing chemists, of that city. He was born in the year 1810, educated at the local grammar school, and having decided to enter the medical profession, walked the London hospitals. After taking his diploma he set up in practice in his native city, and was appointed to the chair of medical jurisprudence in the medical school of Manchester. During the visitations of cholera in 1849, and the Irish plague in 1851 and 1852, when many medical men lost their lives, he drew up an exhaustive report on the sanitary state of a large portion of Manchester, which had the effect of directing attention to the hygienic condition of the people, and led to the formation of the present Sanitary Association, which has done much good work. Mr. Richmond held several public appointments, and enjoyed an extensive practice, until his retirement, in the neighbourhood of Manchester. He was much beloved by a wide circle of friends.

NOTTINGHAM.

NOTTINGHAM AND NOTTS CHEMISTS' ASSOCIATION.—The annual dinner of this association was held in the Masonic Hall, Nottingham, last week, when about sixty members and friends attended, Councillor Fitzhugh, J.P., presiding; Mr. W. J. Rogerson (vice-president) and Mr. W. H. Parker occupying the vice-chairs. Amongst those present were Professor Clowes, Dr. Haydn White, Councillor Gibson (Manchester), Messrs. E. Parker (Liverpool), W. H. Casson (Manchester), C. L. Casson (Tudor Sons, Liverpool), W. H. Des Forges and Walbran (Hull), and the leading local pharmacists. After the loyal toasts Mr. S. V. Holgate proposed "The Pharmaceutical Society." He observed that he thought the Pharmaceutical Society had done a very great work, although that was many years ago. (Laughter.) For some years now they had appeared to have been in a state of quiescence; but perhaps this was the sort of calm that preceded a period of unusual activity. He hoped it might be so, and that when the Society did commence work again they might have as the result of that work benefits conferred upon the chemists of the community such as they felt themselves entitled to. (Hear, hear.) Burdens had been placed upon them heavy enough in all conscience, and they had a right to expect something in return. (Applause.) Mr. W. H. Parker, in responding, acknowledged that the Pharmaceutical Society was established and was formerly carried on upon very different lines from those followed at the present time. It was established for the protection of the trade, but now it seemed that trade matters were simply or almost ignored, and the higher branches of scientific education only were looked after and dealt with. That was a very good thing, but there were strong objections to the fetters by which the trade had been put into the background. The Society was very remiss in its duty as to protection, and all that might be altered if the trade would unite and send to represent them on the Council those who would better express their views. (Applause.) Professor Clowes, in giving "The Nottingham and Notts Chemists' Association, with the Officers and Council," said that the association had been doing a most important work, and that he was surprised if they could not bring the pressure of such an association to bear upon headquarters. He referred to the excellent work which the association had done before the University College was started, in the education of apprentices and assistants—work which ought to be recognised by headquarters. He had great pleasure in his educational connection with the association. (Applause.) The Chairman, in response, stated that the association was never in a more satisfactory position than at the present time. They had as many members as they had ever pos-

sessed, and more associates. They had between fifty and sixty members and thirty-two associates, of whom thirty were attending the chemistry classes. The fact spoke well for their associates. They had dropped their monthly meetings, perhaps because the members felt so learned that they thought it unnecessary to attend. They, however, looked well after the education of the juniors. Other toasts followed, and during the evening vocal selections were capitally rendered by Messrs. Pinder, Kelsey, Bastick, T. Davis, C. L. Casson, and S. Parr, jun. Mr. H. Woodhouse officiated as pianoforte accompanist.

WORKINGTON.

AN INK QUESTION.—At the Workington County Court on December 16, a curious case was again heard, in which a sum of 10% was in dispute, a drop of ink having fallen on a figure and made it doubtful what the sum should be. Photographs of the original document were put in, experiments having been tried with the receipt with a view to getting the blot removed without injuring the figure. A photographer was called, and he stated that he made an experiment with cyanide of potassium. He rubbed some of it over the blot, and in doing so noticed traces of a stroke under the blot, and then he stopped the experiment for fear of destroying the marks. Mr. Webster said the blot had been made by a totally different ink from that which had written the receipt. The case was again adjourned.

SCOTLAND.

ABERDEEN.

WE believe we are correct in stating that the trustees of Mr. William Mackay have not received any offers for the business. This may be pretty much owing to the present excessive rent; but we hear that in June it will be reduced to a fairly reasonable figure, and that the trustees are to carry on the business until then under the management of Mr. Barclay.

BURGLARY.—On the morning of December 13, when Mr. J. Dunn, chemist, opened his shop in Woolman Hill, he found it had been forcibly entered during the night and the few coppers left in the till abstracted. Not satisfied with this, the burglars had turned their attention to a desk, which they broke open with apparently the same instruments they had used to force the door, and abstracted a sum of 9s., also in copper. Nothing else in the shop was touched.

EDINBURGH.

MR. GEORGE AYRE, for many years with Messrs. Duncan, Flockhart & Co., North Bridge, Edinburgh, has taken over the business of Messrs. Dandie, Newby & Dandie, Perth. This business, which is one of the oldest in Scotland, was begun in 1812 by Mr. John Duncan, in conjunction with Mr. Hamilton (afterwards of Dundee). Mr. Duncan, eight years later, came to Edinburgh and founded the firm now so well known as Duncan, Flockhart & Co.

ROYAL SOCIETY OF EDINBURGH.—A meeting was held on Monday, Sir Douglas Maclagan in the chair. Amongst the papers read was one by Dr. Byrom Bramwell, in which he described a series of investigations and an apparatus he had, by the assistance of Dr. Milne Murray, prepared for graphically recording the exact time relations of cardiac sounds and murmurs. The impressions made upon smoked paper placed in the apparatus, which embraced the use of a flexible tube stethoscope, a telephone, and a species of graphophone, were very satisfactory, and tracings of them were exhibited to the meeting by means of a lantern. He had written to Mr. Edison pointing out the benefits which an adaptation of the phonograph would confer upon practical medicine, and expressed the hope that either he or Professor Tait would furnish an instrument suitable for clinical observation.

LINLITHGOW.

THE ENEMY.—This ancient seat of kings has at last been attacked by the invader—a grocer hailing from Dundee, who offers patent medicines and other articles of druggists' stock at the usual attractive and killing prices. Local enterprise quickly got on a footing with the invader; and, not to be outdone, another grocer has commenced to advertise patent medicines *free* to the deserving poor.

Legal Reports.

THE HOP BITTERS COMPANY'S LAWSUITS.

AN UNSUCCESSFUL MOTION TO COMMIT MR. BECK.

IN the Chancery Division of the High Court of Justice on Wednesday, before Mr. Justice Stirling, an application was made for a writ of attachment against Mr. Beck, chemist, of Hastings, on the ground that he had committed a contempt of court in writing and publishing in *THE CHEMIST AND DRUGGIST* a letter calculated to interfere with the due course of law and justice in an action pending between the plaintiffs, the Hop Bitters Company, and himself. Mr. Theo. Aston, Q.C., and Mr. Swinfen Eady supported the motion; Mr. Graham Hastings, Q.C., opposed.

Mr. Aston, Q.C., in his opening statement said the case was analogous to that of *Daw v. Healy*, in which the Court held that a letter written and published while an action was *pendente lite* was most improper. The simple question was whether this letter (which he would read, and the authorship of which was not denied) was a proper letter, or whether its character was such as to justify the plaintiffs in their motion for an order of committal. The facts were that on November 8 last, at a meeting of the shareholders of the Hop Bitters Company, a statement was made by the chairman, and it was reported in the trade journals. It was to the effect:—"Several shareholders asked questions with reference to the money spent in litigation, and the solicitor explained that 1,600*l.* or 1,700*l.* had been spent, and then came this important part:—'Mr. Beck, of Hastings, had put the company to every possible expense within his power, and had not only commenced an annoying litigation against them, but had also used his position with the trade generally in setting them up against the company. Mr. Beck's name was as familiar as the company's name throughout the provinces. If it had not been for Mr. Beck the law charge would have been very considerably reduced.'" That statement was made to the shareholders under circumstances which, he submitted, were privileged. The chairman and solicitor were giving to the shareholders an explanation of the cost of the litigation in which their money had been spent, and prior to the appearance of the report the account so given was perfectly true. But Mr. Beck thought he was justified in writing a letter which appeared in *THE CHEMIST AND DRUGGIST* on November 19—

His Lordship: I suppose that the report of the statement to the shareholders was published with the sanction of the company.

Mr. Graham Hastings, Q.C.: Yes, my lord.

Mr. Aston: I say not, my lord. The editor of that paper attended the meeting, and on his own responsibility inserted this notice, with which we have nothing whatever to do. The plaintiff (continued the learned counsel) might have had some difficulty in fixing Mr. Beck as the author of the letter of November 19, but fortunately he had relieved them of the responsibility. He had not avowed himself the author, but he had filed an affidavit in justification of what he had written, and had said that his statements were true. The material part of the letter he would read.

Mr. Graham Hastings: I think the whole of the letter should be read now.

Mr. Aston: Very well. I will read the letter which appeared in *THE CHEMIST AND DRUGGIST* of November 19. It is as follows:—[The learned counsel then read the letter, as published in *THE CHEMIST AND DRUGGIST*, November 19, 1887.]

Mr. Aston: I submit that that was a most improper letter to publish under these circumstances. I have nothing to do now with the use by the editors of the trade journals of the report of the proceedings at the company's meeting, but I do say that nothing can justify the innuendo contained in this letter—*i.e.*, that the Hop Bitters Company had discovered it to be necessary to examine a witness in America, because they had not confidence in their rights, and consequently they sought to postpone the trial on unworthy grounds. Next, I have to submit that another statement in the letter is scandalous—*viz.*, the one that "the company are on the rampage, breathing fire and bloodshed, and endeavouring to terrify the makers of any mixture likely

to rival their own." It is that language on the part of Mr. Beck which brings him, as a party to the action, within the law laid down in *Daw v. Healy*. I submit that the statement constitutes a clear contempt of court. The statements made by the chairman and solicitor at the meeting of the shareholders of the company before referred to were of a very simple character. Mr. Beck had put the company to very great expense and annoyance, because he said he was fighting the battle of the trade. The defendant had further encouraged other persons to oppose the company, and he has by letters and statements invited them to resist the claims of the company in matters in which he has no interest, beyond that he wants them to say that what the company calls a piracy is no piracy at all. The piracy of which the company complains is the get-up and mode in which they send out their goods as the goods of the plaintiff company. Under these circumstances certain affidavits have been filed. They are all pretty much of the same character. In one Mr. Lynch, a dealer in London, says he has been in the business for twenty years, and knows the preparations of the Hop Bitters Company, as well as the defendant's preparation named "Compound Hop Bitters." He has seen the letter of November 19 in *THE CHEMIST AND DRUGGIST*, and he considers it to imply that the plaintiffs' object in getting a commission sent to America was to delay the trial of the action against the defendant, and unless he had been informed to the contrary he would have himself come to that conclusion. The statement in the letter that "the company were on the rampage, breathing out fire and bloodshed, and endeavouring to terrify the makers of any mixture likely to rival their own," conveyed to his mind, he says, a belief that the object of the company in securing this delay was to stop as many people as they could from selling a rival manufacture to their own. Mr. Jones, who has been twelve years in the trade, has filed an affidavit containing a similar declaration, as also has Mr. Newbery, who has been thirty-two years in the trade. It would, perhaps, be just as well that I should here explain the circumstances which led to the sending out of the commission. In the original case Mr. Seeley made an affidavit in support of the motion of the plaintiff company, he having been one of the vendors to the company. He subsequently fell into ill-health, and found it necessary to go to America. On the night he was to start for the Continent Mr. Craig, a Commissioner of Oaths, waited on him at his residence at 11 P.M., and he had filed an affidavit that he then swore Mr. Seeley.

Mr. Hastings: That affidavit has not been filed until to-day, although it was sworn on April 18.

Mr. Aston: My only object is to prove that there was an affidavit prepared showing the *bona fides* of the plaintiffs application.

The Judge: Did you get an order for a commission to proceed to America?

Mr. Aston: Yes, my lord, with the consent of the other side. Whatever the effect of the delay, the statement by the defendant in his letter is not justified. There may have been delay on the plaintiffs' side. I am not going to excuse delay, but, as your lordship knows, a commission to America cannot always end its task rapidly. What I complain of in the letter is the statement made by Mr. Beck, which is calculated to affect the course of justice in these proceedings, and I ask your lordship to say it constitutes a clear contempt of court. According to all the decided cases, this is an offence, and in this case it has, I say, been aggravated by Mr. Beck's affidavit of December 13, in which he attempts to justify what he has done. In that affidavit Mr. Beck says he considers that the connection of his name with the report of the proceedings of the company on November 8 was calculated to injure his position in the trade, and to give the worst impression to his conduct. He acknowledges having sent the letter to *THE CHEMIST AND DRUGGIST* and another trade journal, and in regard to this portion of the affidavit I should like to remark that, if Mr. Beck felt himself aggrieved at anything which appeared in the report of the proceedings at the meeting of November 8, his proper course would have been to have written to the editors of the papers publishing it, and ask them to withdraw any statement which he thought injurious. He could also have brought an action against the editors or printers and publishers of the journals. But he did nothing of the kind. He instead took

the law into his own hands, and now in his affidavit he says that the contents of the letter are true.

The Judge: I have read the affidavit.

Mr. Aston: His words are, "Such letter, and every statement therein contained, is true in substance and in fact." Then there is an affidavit by the defendant's solicitor in justification of some of the proceedings of the defendant. I do not think it is necessary now to refer further to that affidavit, but if my learned friend Mr. Hastings refers to it your lordship will perhaps allow me to deal with it in the course of my reply. I will only say in passing that the solicitor stated that he had had an interview with the editor of THE CHEMIST AND DRUGGIST, who told him that the report which appeared in that paper of November 12 was a true and correct report of what transpired at the meeting of November 8.

Mr. Hastings: The editor referred to is the editor of the *Grocers' Gazette*.

Mr. Aston: But the editor of THE CHEMIST AND DRUGGIST was there, and he filed an affidavit, in which he states that he was at the meeting in his professional capacity, and he subsequently prepared the report of the meeting which appeared in THE CHEMIST AND DRUGGIST of November 12. He states that the report was a true one, but that it was condensed, particularly such portions as referred to Mr. Beck. He adds that he saw Mr. Angus Cameron, the managing director, there. He knew him personally and had some conversation with him. Other reporters were present, but no request was made to any of them—so far as he knew—to suppress any portion of the proceedings. He (the editor of THE CHEMIST AND DRUGGIST) received the letter of November 19 from Mr. Beck, and inserted it in his journal. Mr. Aston, continuing, said:—There is nothing contained in these affidavits which forms any excuse for the defendant, or affects the position which I now on behalf of my clients take up. The statements made by the chairman and solicitor at the meeting of shareholders were made with the object of explaining the way in which the shareholders' money had been spent. Such statements, if they were damaging to Mr. Beck, were statements made on a privileged occasion by privileged persons to shareholders who were entitled to the information. If reporters were present at such a meeting and reported statements there made, then the printers and publishers inserting them could be made liable to an action. At all events, what they do they do at their own risk and peril. I do not, however, wish to say that in some cases privilege was not stronger than in others, but in this case there was privilege in the statements made, and when Mr. Beck took upon himself to publish the letter he did so at his own risk. The plaintiffs might have summoned the editor of the paper to appear before his lordship, but inasmuch as Mr. Beck had admitted that he was the author of the letter, and had attempted to justify it by saying that what he wrote was true in substance and in fact, there was no necessity whatever for the plaintiffs to proceed against the editor of THE CHEMIST AND DRUGGIST. But Mr. Beck has gone further, for he has informed us that the letter appeared also in another journal connected with the trade, a fact of which the plaintiffs were not previously cognisant. The learned counsel then proceeded to cite legal authorities on the question of publications affecting actions *pendente lite*. Taking the case of *Daw v. Healy* (7 Law Rep. Eq.), he said that in that case the Court held that it was an offence on the part of a litigant to publish a statement affecting the validity of a patent as to which litigation was then going on. Another case—*Tichborne v. Mostyn*—was one in which it was held that the publication of affidavits before trial was contempt of court. In the present action one of the parties had published a statement to the effect that the action by the plaintiffs against himself had been delayed, and had not been carried on *bonâ fide*—that, in fact, it was an action which was not sustainable. The defendant, in fact, said, "The case, having been set down for trial, stood 32 in Justice Stirling's list at the commencement of the present sittings. The Hop Bitters Company, finding the case near hearing, discovered that it was necessary to obtain evidence from America; they have obtained an order for a commission to examine a witness there, and the result is that the case cannot be heard until next year." Reading between the lines of that letter and giving a proper construction to

the innuendoes contained therein, he (Mr. Aston) submitted that the Court should hold that this publication was a contempt of court. He would ask his lordship to deal with the defendant so as to meet the ends of justice.

Mr. Swinfen Eady urged that the offence of which Mr. Beck had been guilty was aggravated by the affidavit attempting to justify what had been done. He had asserted that the statements of the letter of November 19 were true in substance and in fact. Mr. Beck's letter was disgraceful in its terms; it was full of imputations not veiled; it imputed unworthy motives on the part of the plaintiff company in the boldest language, and surely that was an aggravation of the original offence. It was impossible for anyone reading the letter to come to any other conclusion than that the action brought by the Hop Bitters Company against the writer was not a *bonâ fide* action, and that the plaintiffs knew they had no case at all on its merits, for it was added— "The Company are on the rampage, breathing out fire and bloodshed, and endeavouring to terrify the maker of any mixture likely to rival their own." If his lordship followed in the footsteps of Lord Hardwicke and Vice Chancellor Page-Wood, who held that nothing could be more pernicious than statements calculated to prejudice the minds of the people before a case was heard, then he must hold that Mr. Beck had been guilty of a gross contempt of court, and that there was nothing to justify his letter. There was a real necessity for sending out a commission to America, and the affidavits filed by Mr. Jones and other gentlemen in the trade showed what effect was produced on their minds when they read the letter of November 19 in THE CHEMIST AND DRUGGIST.

Mr. Graham Hastings: I have to submit that this is a case in which no order should be made against the defendant, and that the plaintiff company ought on the contrary to be condemned in the costs of the motion. It appears to me that the chairman of the company and others, by their speeches at the meeting of November 8, invited such a statement as Mr. Beck published. The other side, in the first place, claim that the meeting, being a meeting of shareholders, was privileged. Had it been a meeting of shareholders only it might have been privileged; but my learned friends are under a mistake when they claim that the statements made at this meeting of November 8 are no less privileged because people other than shareholders were present. It is quite immaterial whether the statements were made for the purposes of publication or not. The reporters were present.

Mr. Justice Stirling: I do not know whether or not that point of privilege has been settled. In a recent case, *Household Stores v. the Liverpool Mercury*, the point was much discussed in the Court of Appeal, but no decision was given on it.

Mr. Graham Hastings: If you allow the press to come, and statements are made, surely they are not privileged. In this case it is not necessary to confine the arguments simply to that, for the plaintiff knew that pressmen were there. It is plain from the affidavits that the directors and the managing director knew that the editor of THE CHEMIST AND DRUGGIST was present, and they must be taken to have known they were there for the purpose of obtaining a report of the proceedings and publishing it. I will go a step further, and submit that it was with their sanction that the reporters were present. No one said that they were not to publish a report of the proceedings. It is an inference from the evidence that the reporters were allowed to be present for the express purpose of reporting what took place. The report appeared in THE CHEMIST AND DRUGGIST and the *Grocers' Gazette*. My learned friend has alluded to the animus which he says appears in the letter of the defendant; but I think we shall find the animus if we read the report of what took place at the meeting. Let us read the speeches there connectedly. The chairman spoke of traders who were dishonest—or rather of dishonest dealing—and counterfeit labels and bogus make-ups, &c. I now read from the *Grocers' Gazette* report: "Adverting to the competition which they had to meet, he said that great expense had been incurred by the company in legal proceedings against dealers in what he characterised as counterfeit hop bitters, and out of forty actions the defendants in twenty-six cases apologised and undertook to discontinue the manufacture and sale. In

twelve cases the defendants submitted to injunctions, and in the remaining cases the result depended upon actions still pending. The 789*l*. in the accounts for law costs represented a moiety of the bill of costs due from the company to their solicitors, the other moiety being charged to the accounts of the current year. The publication of the apologies from the makers and the vendors of spurious hop biters in the general and trade newspapers had so good an effect as to elicit the sympathy of those firms who sold the company's goods, and prompt them to assist in stopping the practice by other traders." Then after that there came some observations by shareholders about law expenses, when the solicitor explained that from 1,600*l*. to 1,700*l*. had been expended in law costs, and that the defendant, Mr. Beck, of Hastings, had put the company to very great expense and annoyance by his counter-actions [as a fact there was a mistake here, as there was only one counter-action], and by every other means in his power Mr. Beck had also encouraged other persons to oppose them.

Mr. Aston: We did not publish that report in the *Grocers' Gazette*.

Mr. Graham Hastings: My contention is that you allowed reporters to be present at the meeting for the express purpose of making a report. Your argument is that Mr. Beck's litigation is not *bona fide*. This was a direct invitation to Mr. Beck to come forward and contradict that statement. The full text of that statement is that "Mr. Beck, of Hastings, had put the company to every possible expense within his power, and had not only commenced an annoying litigation against them, but had also used his position with the trade generally in setting them up against the company. Mr. Beck's name was as familiar as the company's name throughout the provinces. If it had not been for Mr. Beck, the law charges would have been very considerably reduced."

Mr. Justice Stirling: Is there any motion against the printers or publishers of the newspaper?

Mr. Graham Hastings: No, my lord. The practice of the Court has been to discourage such applications against newspapers. Lord Justice James, following the late Master of the Rolls (Sir George Jessel), said: "I think these motions are a contempt of court, for they waste the public time." I do not say it is so in this case, but one knows that many of these notices to commit are merely intended as advertisements. Well, to continue: that was the challenge thrown down at a public meeting by the plaintiff company to the defendant, who met it in the way which is now objected to. Let us look at the letter of November 19. I will read it. The learned counsel, having done so, said: Now, that is a letter addressed by the defendant simply to the trade, and answering the imputations made upon him by the company. But exception is especially taken to the sentence commencing, "Meanwhile, the company are on the rampage." Well, "on the rampage" is not a very classical phrase, but it is clear what is meant. It is obvious the word has something to do with "rampant"; I do not profess to know the meaning of "rampage"—(laughter)—and that means that the company were attacking any person whom they thought in any way infringed their rights. The evidence support that view very fairly. We have it on the chairman's statement that the Court had issued as many as fourteen writs in one week.

Mr. Justice Stirling: Then there is what you say about the trial.

Mr. Graham Hastings: Yes, the defendant says that the plaintiffs had obtained an order for a commission to examine a witness in America, and the result is that the case cannot be heard until next year. That is true, and it seems to me that the conclusion to be drawn from this is that the plaintiffs are not in their wisdom by any means in a hurry to go on. Surely that statement is not one which is an interference with the course of justice. "Then they obtained an order to examine a witness in America, and the action cannot go on this year." That is perfectly true, and the statement cannot be impugned. The statement simply comes to this: the plaintiffs are not proceeding with due diligence. But I do not see that that is any contempt of court. I suppose that this is really only a counter-move to the defendant's motion about a proclamation in July last, and that they are lending themselves to this form of annoyance and vindictiveness. Really that is what to my mind it amounts to. Mr. Swinfen Eady has referred to the evidence of Mr. Jones. Mr. Jones is one of the common vouchers

of the plaintiff company, for he has sworn a large number of affidavits on their behalf in their several actions. The most that he can say is that if he had been shown this letter of the defendant's he should have hesitated about making an affidavit. It is impossible to suppose that the gentleman has been intimidated, and your lordship will attach no great weight to an affidavit. The only other point is that Mr. Beck has been encouraging people to oppose the company. He answers that he has done nothing of the kind; all that he has done has been to set an example. The plaintiffs seem to think that as soon as they utter a word the defendant in any of these actions must fall down and admit any claim that they choose to make. Surely that is too large a claim even for them to make. I submit that looked at with a fair eye the words "on the rampage," &c., cannot be held to constitute a contempt of court, and certainly are not sufficient to justify the Court in sending a man to prison. The most that could be said is that Mr. Beck has in this letter explained his reasons for answering the attack which had been made upon him by the company. His letter of explanation was necessitated by the publication by the plaintiffs themselves of words reflecting upon Mr. Beck's conduct in the litigation, and the reflections cast on Mr. Beck at the meeting of November 8 were certainly greater than the reflections which he cast on the company in his letter. Even if your lordship should think that these reflections should not have been made by the defendants, then I submit that this is not a case in which the company should have any costs.

The Judge: But in your affidavit you justify the statements.

Mr. Graham Hastings: Yes, we vouch for their accuracy and truth. The fair inference, I submit, which is to be drawn from the references to the commission is that the company are not in a hurry to contest this trial. The order which they obtained was that the trial is not to be proceeded with until fourteen days after the return of the commission. Now the return of the commission is entirely in their own hands.

Justice Stirling: But you agreed to that order.

Mr. Graham Hastings: We agreed to the usual order, which is that the trial should be proceeded with so many days after the appointment of the commission. This reference to it is, no doubt, a delicate thing, but I do not see any contempt of court in it. If there is, then, on behalf of the defendant, I will express regret to the court for it; but, in any event, I submit that this is not a case for costs for the plaintiff company.

Mr. Aston was proceeding to reply when Mr. Justice Stirling interposed, and said: What is in my mind is this: it must be taken that the reporters were present at the meeting with your knowledge, and with your knowledge that these remarks would get into the papers. In the presence of these reporters you had no right to make them. Ought I, under these circumstances, to give you any costs?

Mr. Aston: I hope so. The statement in the defendant's letter is a different one altogether to any made at the meeting. There nothing was said about being on the rampage, or about fire and blood.

The Judge: If you invite reporters they must report. They are expected to tell something about what took place.

Mr. Aston: What will my learned friend do? Will he withdraw his statements, and say that he regrets them?

Mr. Graham Hastings: Yes, if you will do the same thing.

Mr. Aston: I do not think it right to take up your lordship's time on a question of costs.

The Judge: If you withdraw your imputations of dishonesty against Mr. Beck, and he withdraws all imputations against you, I will make no order on the action.

Mr. Aston: I am going to address myself to this question of dishonesty. That there have been dishonest persons against whom we have been proceeding is true. I have your lordship's judgment to that effect.

The Judge: Yes, but any persons reading this report would come to the conclusion that Mr. Beck was one of the dishonest persons.

Mr. Aston: If your lordship thinks so I will not keep it up any longer.

The Judge: Then Mr. Beck not being one of the persons so included, and he withdrawing any imputation of improper

conduct in this action on the part of the plaintiff company, I think the proper thing will be to make no order.

Mr. Graham Hastings: I am willing that it should be so.

Mr. Aston: I am in your lordship's hands. In what terms will the order be?

Mr. Graham Hastings: You withdraw all imputations, and we also withdraw all imputations.

The Judge: Yes, let that be expressed in the order.

The case thus ended.

THE HOMŒOPATHIC HERESY.—MILLCAN *v.* SULIVAN & OTHERS.

Judgment.—Monday, December 19.

Mr. Justice Manisty, in delivering judgment in this case (fully reported in our last issue), said:—This is an action brought by Mr. Millican against ten persons said to be the members of the committee of management of the Queen's Jubilee Hospital. The action has been dismissed against one—Mr. Phipson—and therefore it is an action really against nine, who, together with Mr. Millican, constituted the committee of management of the Jubilee Hospital; and the plaintiff complains that the defendants, viz., the nine, did wrongfully and illegally suspend him from his office or appointment of one of the medical men who were the medical staff of the hospital. Now the Jubilee Hospital was formed and constituted in the present year, and by the rules of the hospital the staff was to consist of a president, a vice-president, patrons, patronesses, governors, trustees, treasurer, and a committee of management; the secretary, by another rule, is to be a member of the committee, and then there are certain other persons of the establishment such as nurses, and so on. By Rule 7, "The government of the hospital shall be conducted by a committee, consisting of an equal number of the medical and surgical staff and lay members, all of whom must be governors of the hospital; one-third to retire annually, but to be eligible for re-election at the annual general meeting;" therefore the first point that arises in this case is as to the constitution of that committee. It was to consist of an equal number of the medical and surgical staff. It seems that the committee really consisted of eleven; and how, then, can they have had an equal proportion of medical and lay members? It seems odd to conceive how you can get two even numbers out of an uneven number. That, to say the least, is a difficulty, but it does not in any way affect the judgment which I am about to pronounce. It may be that one had died; I don't know how that may be, but all that I know is that at the time the action was commenced the committee consisted of eleven members. Then the next rule that applies is the 8th rule: "The committee of management shall appoint at any time, subject to confirmation by show of hands, or by ballot, if required." Now some question turns on that. Sir Henry James said before me that "if required" here only referred to the ballot if necessary; but the important point is that the committee of management shall appoint, subject to confirmation by show of hands, or by ballot, if required, "at the first annual or special general meeting of the governors" following the appointment to be for one year, and subject to confirmation at the next annual meeting. Now it seems, therefore, that the committee, I suppose, had the power to appoint and did appoint as many physicians and surgeons as were desirable. The plaintiff, Mr. Millican, was one of the gentlemen so appointed, and then such appointments are, by the rule, "subject to confirmation by the governors at the next annual or special general meeting." It would seem that the governors exercised control over these appointments, and the question that arises in this case is whether or not the committee, or a certain portion of the committee, had the power to suspend the plaintiff, Mr. Millican. Then came the 9th rule, but I don't think that rule touches the present case, for reasons which I shall give hereafter; but it is worthy of note that at the end of the year three of the members are to retire, and they are not to be re-elected by the committee but at the annual general meeting; so that apparently the appointments and the re-appointments rest entirely with the committee of management after they have been once appointed, subject to confirmation at the next annual meeting or at a special general meeting. And then by the last rule the secretary is to be a permanent member of the committee. Three members are to form a quorum, and the

chairman is to have a casting vote. Now, it would seem that if the committee had the power to suspend the appointment of one of the medical officers, three members forming a quorum, two out of the three might dismiss one of the others. That would be a strange state of things; but I come to the conclusion that no such state of things could arise. How many voted one way or the other way we cannot tell, because, although Mr. Millican is very anxious to know how the votes went, the votes were taken by ballot, and I think that the last letter from the defendants' solicitors to the plaintiff says: "I am unable to inform you who actually voted in favour of the resolution, as the matter was put to the ballot in the ordinary way, and no names were taken down." It may be, therefore, that the plaintiff was suspended by four members—that would have been a majority, there being only seven present—and it may be that they were unanimous. Now, in that state of things let us see what took place—such being the rules and such being the complaint here. On January 31 in the present year Mr. Benham, the secretary, who is also a member of the committee of management, wrote a letter to the plaintiff announcing his appointment. Now, that state of things seems to have gone on happily and pleasantly until April 30, when Dr. Thudichum, one of the medical officers and a member of the committee of management, wrote to Mr. Millican, intimating his intention of bringing before the committee Mr. Millican's connection with the St. Margaret Infirmary, where homœopathy was sometimes practised. Now, certainly that purports to be the letter of a friend; whether it is so or not subsequent correspondence will throw some light upon. This we certainly see, that Dr. Thudichum is the prime mover, and that his object is to get Mr. Millican to withdraw altogether from the Margaret Street Hospital. Now, at the Margaret Street Hospital it is perfectly optional whether patients are treated by homœopathy or in the ordinary way, and I do not trace in the resolutions passed anything which will show that Mr. Millican does profess or ever meant to profess homœopathic principles. Well, that being on April 30, Mr. Millican simply acknowledged the receipt of the letter. On the same day (April 30) Mr. Millican received another letter from the secretary intimating that the matter was to be brought before the hospital committee, and suggesting he should consult with his colleagues before that so as to save a long and personal discussion. Upon the receipt of this the plaintiff, perfectly in the dark, wrote in reply: "Will you kindly send me the date and the hour of the meeting, and the terms of the resolution which I understand is in contemplation?" Now the meeting took place on May 5, and these resolutions, which I am now going to read, were passed. There were present Dr. Thudichum and all the eleven members of the committee. It was proposed by Dr. Thudichum and seconded by Dr. Pearse, "That no member of the staff of the Queen's Jubilee Hospital shall profess or practise homœopathic doctrines, or be connected with any homœopathic establishment or any institution in which homœopathy is either the recognised or optional mode of treating the sick, or at which avowed or known homœopaths are office holders." Now that was a very comprehensive resolution, and an amendment was proposed by Mr. Phipson (against whom the action has been dismissed), and seconded by Mr. Church, that the motion be separated into two, and that independent votes be taken on each motion. This was a most reasonable method. The first resolution put to the meeting then read as follows: "That no member of the staff of the Queen's Jubilee Hospital shall profess or practise homœopathic doctrines." That resolution was carried, and the plaintiff assented to it. The second resolution then put was: "That no member of the staff of the Queen's Jubilee Hospital be connected with any homœopathic establishment or any institution in which homœopathy is either a recognised or optional mode of treating the sick, or at which avowed or known homœopaths are office holders." That resolution was carried. How it was carried, whether by a large majority or not, I know not; but it was carried, Mr. Millican dissenting. He assented to the first, he dissented to the second resolution. These resolutions being carried, a copy was sent to the plaintiff, who in reply wrote a long letter. I do not think I need read it all, but he declines to recognise the effect of the resolution. [The important portion of the latter was included in our report last week.] That was the answer to the letter of the

secretary asking Mr. Millican what course he intended to pursue. Then on the 17th the secretary gave Mr. Millican notice that there would be another meeting on May 19. Now on May 19 a meeting was held. There was another meeting before that—a meeting on the 12th—when the secretary was directed to write the letter which I have just read. Then comes the meeting of the 19th, Dr. Thudichum in the chair. The letter from Mr. Millican was read in reply to the secretary's letter, and it was then proposed that the secretary be requested to call on Mr. Millican to resign his appointment. On May 22 the secretary sent a copy of the resolution to the plaintiff. Mr. Millican simply wrote acknowledging the receipt of the letter. On the 26th another meeting was held, Dr. Thudichum in the chair, and there were five members of the committee and the secretary present, reducing the eleven members of the committee to seven. It was proposed by Dr. Thudichum, seconded by Dr. Pearson, and carried, "That the entire business of the committee of management be delegated to a committee consisting of," and then come the names of ten members of the committee of management, leaving out, of course, the plaintiff. It was a most extraordinary course for the members of this committee—acting, I suppose, without advice—actually to take upon themselves to delegate all the powers of the committee to ten of their own number, leaving out, of course, the plaintiff. I thought it was a well settled rule of law that no delegate can delegate his duties to another. But that was the course they took. And then, at the same meeting, immediately after that—after delegating all the powers of the committee of management to themselves—Dr. Thudichum proposed, and Mr. Pearse seconded, a resolution suspending Mr. Millican, and it was carried. Nothing more contrary to law or to decency—nothing certainly more contrary to every principle of law—could be conceived. Now then it was, I think, on the 27th that this resolution was communicated to Mr. Millican, and then the defendants proceeded to appoint his successor. Mr. Millican then put the matter into the hands of his solicitor, and instructed him to take proceedings, which he did, and commenced this action in October. Mr. Millican asked for damages and for an injunction. Now an interim injunction had been granted, and the question is whether or not you ought to make it permanent.

Mr. E. Pollock: An interim injunction was granted, but it was dissolved on June 18.

Mr. Justice Manisty: That was not brought before me. What was the order?

Mr. E. Pollock: An application to dissolve the injunction was made before Mr. Justice Smith. My learned friend Mr. Dickens was present on the other side, and an order was made.

Mr. Justice Manisty: That was not brought before me.

Mr. Pollock: My learned friend agrees with me that the interim order was dissolved on June 18.

Mr. Dickens: Yes; Mr. Justice Smith said on that occasion that he thought the case was one for compensation, and he dissolved the interim injunction.

Mr. Justice Manisty: I have every possible respect for Mr. Justice A. L. Smith and for his opinions, but I hold the very strong opinion that these proceedings from beginning to end were wrong, and contrary to the first principles of law. If the committee of management thought this was a question for a certain charge which ought to be brought before the governors, they had an easy and a plain course before them, namely, to call a special meeting of the governors of the hospital and let them decide the matter. But here a number of the members of the committee meet and delegate their powers to a committee—to a sub-committee, and for that sub-committee to remove one of the medical officers appears to me contrary to the principles of law, and against the rules of the committee, whereby they appointed the medical officers subject to the confirmation of the governors at a general meeting. They should appoint the medical officers under these rules, and if they thought that the hospital would be permanently injured, and that there was necessity for instant action, their course would have been to have brought the matter before a general meeting of the governors, who would have been asked to confirm something which the members of the committee thought right, subject to confirmation by "show of hands, or by ballot if required." But they took the law into their own hands, and to delegate all

the power of the committee into their own hands seems to me to be a flagrant and palpable abuse of their office.

Mr. Pollock: It was not a sub-committee who suspended Mr. Millican, but the whole committee.

Mr. Dickens: No, it was the sub-committee. Your lordship is quite right.

Mr. Justice Manisty: On the 26th a resolution was passed.

Mr. Pollock: Yes, my lord; there were two resolutions, one the appointment of a sub-committee, and the second the suspension of the plaintiff. Both these resolutions were passed by the whole committee.

Mr. Dickens: That has never been argued.

Mr. Justice Manisty: I think you will find that that is not so. Here is a copy of the minutes of the meeting on May 26, when there were present seven members.

Mr. Pollock: It was a legal committee meeting.

Mr. Justice Manisty: Yes, but it is not the whole committee. There are only seven present. I only complain that it was a sub-committee which suspended Mr. Millican. They delegated the power of the whole to a sub-committee.

Mr. Pollock: It was proposed by Dr. Thudichum, and seconded by Mr. Pearson, that the plaintiff be suspended—that is, by the committee then present, and not by a sub-committee.

Mr. Justice Manisty: Not by the members of the committee, but by the members then present.

Mr. Pollock: I thought your lordship said it was the sub-committee.

His Lordship: I read the names of the committee present to whom the work was to be delegated, and that included all the ten, leaving out the plaintiff, of course. Nothing to my mind could be more extraordinary or improper, and I must therefore grant an injunction against all the members of the committee except against Mr. Phipson, against whom the action has already been dismissed. There must, therefore, be an injunction against the nine. Now, it appears to me that Mr. Millican having stated distinctly that he did not ask for damages, and will be content with nominal damages, it will be better—indefinitely better—for him not to ask for damages at all. I do not think that the plaintiff's character has been damaged to the extent of one farthing, and, therefore, in his own interest, I say it is infinitely better for him not to ask for damages. As I have said, I do not think that his character has been damaged, and to press for damages—nominal damages—would only be to confess that he had been damaged. Therefore, I simply make an order against the defendants to restrain them by injunction in the terms of the interim injunction.

Mr. Dickens: Following the terms of the writ?

Mr. Justice Manisty: Was the interim injunction granted in such terms?

Mr. Dickens: I have not a copy of the order. What I have read is contained in the writ.

Mr. Justice Manisty: The injunction is confined to the nine.

Mr. Dickens: Yes, my lord; it is granted in the terms of the prayer.

Mr. Justice Manisty: Yes; I think those terms will do. Then that will be the judgment with costs.

Mr. Dickens: As your lordship gives us costs you will certify for a special jury. We had to pay them, although they were discharged.

Mr. Justice Manisty: I think I did certify.

Mr. Dickens: I quite appreciate what your lordship has said with reference to damages. We do not want substantial damages, but asked for damages, if only 1s., in case of there being an appeal.

Mr. Justice Manisty: That would be an admission that Mr. Millican's character is damaged. No, I think you are better as you are.

Mr. Pollock: I ask your lordship to stay execution. This is a matter of considerable importance to the hospital authorities. If this injunction is sustained the hospital must be given up.

Mr. Justice Manisty: And who has brought that state of things about?

Mr. Pollock: Mr. Benham, who is the founder, and to whom the property belongs—he will shut up the hospital.

Mr. Justice Manisty: That will be a lamentable result. Some people act as though persons practising homœopathy were infected with the plague.

Mr. Dickens: If your lordship stops execution the injunc-

tion will be useless, as they might call a meeting of the governors.

Mr. Pollock: I ask for a stay.

Mr. Justice Manisty: I think you must ask somebody else. Think well before you act, and see if matters cannot be amicably settled. Throw a little oil on the waters.

The Injunction Stayed Pending Appeal.—Stay of Execution for Costs Refused.

In the Court of Appeal on Wednesday morning Mr. Pollock applied to Lords Justices Cotton and Fry to suspend the operation of the injunction. The learned counsel first explained the nature of the action brought by Mr. Millican, and was about to refer to the cases cited—

Lord Justice Cotton: We have nothing to do with that. You ask for a stay of execution. What was the judgment?

Mr. Pollock: It was an injunction in the terms of the statement of claim.

Lord Justice Fry: Is the plaintiff actually performing the duties of surgeon at the present time?

Mr. Pollock: No. He has not done so since May last. The committee have appointed some one else to perform them.

Lord Justice Fry: And this injunction will restore him to the performance of those duties.

Mr. Pollock: Yes. The injunction restrains the committee, their officers and servants, from interfering with the plaintiff in the performance of the duties at the Queen's Jubilee Hospital, and it prohibits the publication of the order of suspension. As a fact, we have never published that, and Mr. Millican's name appears on the books of the hospital as being a person entitled to perform the duties. The ground of the present application is that this hospital, which was founded by Mr. Benham—

Lord Justice Fry: We can hardly go into the merits of the case. Is it not simply a question whether the inconvenience of allowing the injunction to be put in force is so great that we ought to grant a stay?

Mr. Pollock: I submit that it is. When an application was made for an interim injunction, the medical staff intimated they would resign if this gentleman continued at his post, and the hospital would practically be shut up. Great good is now being done by the institution.

Lord Justice Fry: You do not ask for a stay of the order preventing the publication of the suspension?

Mr. Pollock: We never have published it.

Lord Justice Cotton: And there is nothing else you wish a stay for?

Mr. Pollock: Yes, for costs.

The Court: We cannot do that. There must be an undertaking on the part of the plaintiff's solicitor to restore the costs if the Court of Appeal reverses the judgment of the Court below.

Mr. Pollock: Or we will pay the costs into court.

Lord Justice Cotton: No, we never do that. Does anyone appear on the other side?

Mr. Millican: I am the plaintiff in person. I only received notice of this application late last night, and it is accompanied by an affidavit containing new facts, which I should like to reply to.

Lord Justice Fry: The only fact we have received to-day is that your suspension took place in May.

Mr. Millican: Yes, that is correct.

Lord Justice Fry: I think that if we grant this stay it is only fair the defendants should undertake to pay such damages, if any, as the Court may think they should in consequence of the delay in getting the injunction.

Mr. Pollock: Certainly. But Mr. Justice Manisty held there was no damage.

Lord Justice Cotton: And you undertake not to publish the suspension?

Mr. Pollock: Yes.

Mr. M. Millican: Having established my legal position in reference to the matter, and the principle for which I have been contending is one not of a personal or individual character—i.e., that any qualified medical man has a right to meet any other medical man in consultation—I have no intention whatever of forcing my presence at the hospital, or of taking advantage of my legal position.

Lord Justice Fry: Then you do not object to the suspension of the injunction?

Mr. Millican: I object to it, on the ground that it leaves me still in question.

Lord Justice Fry: You will be left in question by the appeal.

Mr. Millican: No notice of appeal has been given.

Mr. Pollock: I have instructions to draw it up.

Lord Justice Fry: You must undertake to deliver notice of appeal.

Mr. Pollock: Certainly.

Lord Justice Fry: I think it is reasonable, Mr. Millican, that you should be at liberty to apply to the other Court to expedite the hearing of the appeal, so that it may be brought on as speedily as possible. You may apply next sitting for that purpose, and I will endeavour to assist it being done.

Mr. Millican: Thank you, my lord.

The injunction, so far as it restrained the defendants from interfering with the plaintiff in the performance of his duties at the Queen's Jubilee Hospital, was then stayed, the defendants undertaking to set down the appeal the same day. The application to stay the remaining portion of the injunction was dismissed; and that for the stay of execution for costs was also refused, the plaintiff's solicitor to give an undertaking to return them if the Court of Appeal reversed the decision of Justice Manisty. Order accordingly; costs to be costs in the appeal.

BRITISH SHERRY.

ON December 15, in the Queen's Bench Division, Baron Pollock and Mr. Justice Hawkins decided a case which was submitted to them on appeal from the Manchester city magistrates. George Richards, an officer of the Inland Revenue, sued Rebecca Preston, who was licensed to sell sweets and made wines, but not to sell foreign wines, for selling to him some sherry. It was stated in the case submitted that on February 12 Richards visited her shop and asked for a bottle of the best sherry, and was supplied with a bottle labelled "Best Pale Sherry, British," for which he paid 2s. The cork of the bottle was sealed, and bore upon the seal the word "Sherry." The contents of the bottle were analysed at the Inland Revenue laboratory by two chemists of great experience, who gave evidence that the liquid was, in fact, foreign sherry, containing 33.8 per cent. of proof spirit, and having an actual specific gravity of 1.00146. It was contended, on behalf of the Inland Revenue authorities, that this was what the Act meant by foreign wine; but for the defendant it was argued that the definition of foreign wine was contained in the 21st section of the Act 23 & 24 Vict. cap. 27:—"All liquor which shall be sold or offered for sale by any person as being foreign wine or under the name by which any foreign wine is usually designated or known shall, as against the person who shall so sell or offer the same for sale, be deemed and taken to be foreign wine," and that in this case, the bottle being labelled clearly and distinctly as British sherry, was sold as British wine, and that the purchaser knew it was sold to him as British wine and not as foreign wine. It was further contended for the respondent that, as the liquid sold was not altogether foreign wine, there was no restriction by any Act of Parliament hitherto passed as to the alcoholic strength British wine can be made, and that the liquid sold was within the definition of "sweets" or "made wines," as set out in the 21st section of 23 & 24 Vict. cap. 113. The justices were of opinion that the liquor, although in fact containing a large proportion of spirit, was not sold as foreign wine, and they dismissed the information.

Mr. Wharton argued for the defendant, and contended that the Excise officers could not give evidence that it was foreign wine; and that they were bound by the definition of "sweets" in the statute 4 & 5 Wm. IV. cap. 77, and therefore that the magistrates could not convict.

The Attorney-General argued that the defendant had sold the wine as sherry, and it was proved to be, in fact, a foreign wine, and he relied on the terms of section 21 of the Act 23 Vict. cap. 27, "All liquor sold by any person, whether licensed under the Act or not, as being foreign wine, or under the name by which any foreign wine is usually designated or known, shall, as against the person who shall so sell or offer the same for sale, be deemed and taken to be

foreign wine;" and he argued that sherry would be understood to mean a foreign wine.

The Court so held, and said that if a man chose to sell wine as "sherry," he must take the consequences. The decision of the justices was, therefore, reversed.

A CONTRACT FOR SOOT.

In the Queen's Bench Division of the High Court of Justice, on December 19, the case of the New Carbolic Sanitary Company v. Jeffries came before the Lord Chief Justice and a special jury. The plaintiffs are manufacturers of sanitary compounds, chemical manures, &c., and they sought to recover damages for breach of contract against the defendant, a chimney sweep and dealer, living at Hoxton. The plaintiffs manufacture a certain manure, and require for this a large quantity of London soot. They alleged that on January 31 last they entered into a contract with Mr. Jeffries, with whom they had had previous transactions, for a supply of soot, and by this contract the defendant agreed to supply them with any amount of soot they might require at 1s. per bag. During January, February, and March defendant was delivering soot under a previous order. Soot rules cheap in price during winter, when the article is plentiful, but rises in value in summer; and the plaintiffs were surprised in March by an intimation from the defendant that he did not intend to deliver soot at 1s. per bag. Plaintiffs sent horses and carts to the defendant's stores for the soot, but he refused to deliver it. The consequence was that the plaintiffs had to buy in the open market, and they now claimed damages for the extra trouble to which they had been put, and for the breach of contract. Mr. Adams, manager, and Mr. Wesley Darley, director of the plaintiff company, gave evidence proving the contract.

On the part of the defendant, it was pleaded that the contract was unilateral and void, and further that it was altered and the new terms substituted behind the defendant's back. In the witness box, however, in answering questions put by the Lord Chief Justice, the defendant practically admitted the contract. A long consultation took place as to the amount of damages plaintiffs were entitled to, and ultimately it was arranged by counsel that the damage should be fixed at the amount of defendant's counter-claim, defendant having counter-claimed 92*l.* 5*s.* for 2,000 bags of soot delivered in January, February, and March. The jury formally returned a verdict for plaintiffs on the claim, with damages 92*l.* 5*s.*, and a verdict for defendant for the same amount on the counter-claim. His lordship gave judgment accordingly, awarding costs to the plaintiffs.

KURTZ & CO. V. SPENCE & SONS.

THE trial of this action was commenced on December 6 before Mr. Justice Kekewich, sitting in the Chancery Division of the High Court of Justice. The plaintiffs in the action (Messrs. A. G. Kurtz & Co.) are chemical manufacturers, carrying on business at St. Helens, and the defendants (Messrs. Peter Spence & Sons) are chemical manufacturers, carrying on business in Manchester. The plaintiffs are the owners of letters patent dated August 10, 1882, to Josiah Wyckliffe Kynaston for an invention "of improvements in the manufacture of certain chemicals and in their purification from iron," and that patent was assigned to the plaintiffs in December, 1885. The defendants are the owners of letters patent, dated August 11, 1882, granted to Peter Spence and Francis Moore Spence, for an invention of "improvements in the manufacture of alum and other salts of alumina." Since December, 1885, the plaintiffs have manufactured and sold sulphate of alumina manufactured in accordance with Kynaston's patent; and the defendants alleged that the plaintiffs' use of Kynaston's patent is an infringement of their (Spence's) patent. And the defendants have threatened the plaintiffs with legal proceedings. The plaintiffs allege that Kynaston's invention is entirely different from Spence's invention, and is not an infringement of the defendants' patent. The plaintiffs claimed a declaration that the use by them of Kynaston's invention was not an infringement of any legal rights of the defendants; also an injunction against the defendants for threatening them with any legal proceedings or liability in respect of the plaintiffs' said manufacture, or of any use by the plaintiffs of Kynaston's invention, or of

Spence's invention. The plaintiffs asked for damages in respect of infringement.

Mr. Moulton, Q.C., and Mr. Lawson appeared for the plaintiffs, and Mr. Aston, Q.C., and Mr. Chadwyck Healey appeared for the defendants.

Mr. Aston, on the action being opened, took as a preliminary objection that no threats had been uttered by the defendants against the plaintiffs.

His lordship expressed the opinion that the validity of the patent was the main question to try.

The Court then adjourned, and next day

Mr. Aston, addressing himself to the question of infringement by Kynaston, said he was met at the outset by a difficulty, which, however, was the difficulty which always arose in a patent case when the patentee had to prove infringement without seeing the process, in which case proof was always given tentatively. The plaintiffs said that the defendants infringed his patent; and the defendants said that if the plaintiffs produced a certain result in accordance with the process of Kynaston, patented on August 10, 1882, there must be an infringement of Messrs. Spence's invention, patented on August 11, 1882. The plaintiffs' patent related to an important treatment of the well-known compound called sulphate of alumina, used largely in dyeing to enable dyes to adhere and to make the dyed material marketable. Sulphate of alumina was commonly manufactured by taking a mineral known as bauxite and treating it with sulphuric acid. Bauxite was so called from being found at Baux, near Arles, and its constituents were—Silica, 13.17; alumina, 60.65; peroxide of iron, 4.8; and water, 15.17. The presence of the 4.8 of iron was very injurious. Those who had seen the effect of a speck of iron in linen would understand the injurious effect of the presence of iron in sulphate of alumina, which was used in delicate cloth dyes. The problem how to free the compound after treatment with sulphuric acid from the presence of iron had occupied many minds. It had been done by the use of arsenic acids and other means, but objections to the process had always been raised on the ground of cost or efficiency, and the problem remained to be solved at the time that Messrs. Spence took out their patent—on August 11, 1882. It occurred to Messrs. Spence that manganese in some form or other would be the very ingredient that would answer the purpose, and accordingly they instructed a gentleman in their employ to make experiments, and among the experiments was one in which Weldon mud was used. The experiment was a success, and Messrs. Spence deposited a provisional specification. At this point of the case it would be necessary to explain what Weldon mud was. Weldon mud was a residuum product obtained during the manufacture of bleaching-powder. The material commonly employed in bleaching-powder manufacture was hydrochloric acid, obtained from chloride of sodium, and peroxide of manganese. The peroxide was composed of 1 part of manganese and 2 parts of oxygen, and therefore the formula was MnO_2 . By taking the peroxide and treating it with hydrochloric acid, the manganese was converted into a chloride of manganese—chlorine was liberated and driven off, and water was formed. The object, of course, was to liberate the chlorine, because bleaching-powder consisted of chlorine, with lime as the base. The residual liquor, containing chloride of manganese, used to be thrown away, but it occurred to Mr. Weldon that if he could take it and give it a dose of lime—the liquid having lime in excess—he would recover the manganese in the form of oxide. He found that the material formed was protoxide of manganese, which he converted into peroxide by blowing air into it, and this existed, with several impurities in the shape of lime compounds, in the Weldon mud. Messrs. Spence by their laboratory experiments ascertained that the effective agent for the removal of iron from sulphate of alumina solution was the peroxide of manganese in the Weldon mud. They applied for a patent, and lodged a provisional specification, dated August 11, 1882, and their complete specification was filed early in February, 1883. Messrs. Spence then found that Mr. Kynaston had filed a provisional specification on August 10, and accordingly opposed Mr. Kynaston's patent, and their opposition was heard on several occasions at great length by Sir Henry James, assisted by Dr. Odling (of Oxford) as chemical assessor. The grounds of the opposition were non-sufficiency of the provisional specification to cover the claim made in the complete speci-

fication. On that occasion all that Messrs. Spence had done prior to the date of their patent and afterwards was fully gone into, with the result that although Kynaston's patent had priority in date to the defendants', the order was reversed, and Messrs. Spence's patent had priority. The learned counsel then went through the defendants' specification, comparing it with the plaintiffs', and argued that the mode of manufacture in both was identical, and contended that as the defendants had priority of date in the letters patent it followed that the plaintiffs were infringers. As to threats of legal proceedings against the plaintiffs, he denied that any had been made, but submitted that if any were made they were justified by what had come to their knowledge of the plaintiffs' manufacture, and were privileged.

EVIDENCE FOR THE DEFENDANTS.

Mr. G. E. Davis, F.I.C., consulting chemist, Manchester, described the process of making Weldon mud and the experiments which he had made on behalf of the defendants. At the time of both of the plaintiffs' and defendants' patents Weldon mud was well known to chemists.

Dr. Ferdinand Hürter, chief consulting chemist to Messrs. Gaskell & Deacon, of Widnes, gave similar evidence.

In the course of the cross-examination of Dr. Hürter Mr. Moulton said that it would probably shorten the case if he admitted that Kurtz & Co. performed the process described by Kynaston in his letters patent of August 10, 1882.

His Lordship said that was admitted on the pleadings.

Mr. Moulton assented to this, but wished it to be understood that he did not admit that Kynaston's patent was an infringement of Spence's.

The Court then adjourned.

On the following day the first witness called was Dr. D. B. Hewitt, F.I.C., and manager to Brunner, Mond & Co., Nantwich, Cheshire, who agreed with the previous witnesses that Weldon mud consisted largely of peroxide with protoxide of manganese and other matters. Had read Messrs. Spence's specification, and understood from it that the patentees prepared an artificial Weldon mud. Had experimented upon the oxide—prepared as directed by the specification. His first experiment was made with natural manganese ore. He found, by very finely dividing the ore, that a certain portion of the iron was removed; he experimented with the ore so divided, but found that it contained so much iron that he did not continue the experiment, especially as he found that the quantities varied with the ore in accordance with the degrees of hardness.

Mr. Aston: If you could have separated the iron from the ore so as to leave it a comparatively pure peroxide, and if you had finely triturated and commutated the peroxide, what would have been the result?—My subsequent experiments showed me that when the iron is removed the power of the manganese to remove the iron in the aluminous solution is largely increased. Another experiment which I made was to take a proportion of Weldon mud, and remove the lime and other impurities by washing it with nitric acid.

Cross-examined by Mr. Moulton: There was nothing in Spence's complete specification to show that the hydrated and not the anhydrous process should be used. There were many ways of completely oxidising Weldon mud.

Re-examined by Mr. Healey: In 1882 a practical chemical manufacturer having Spence's specification put into his hands would find no difficulty in making it a commercial success.

Mr. John Patterson, F.C.S., analytical chemist, Newcastle-on-Tyne, detailed the results of various experiments, which tended to show that the finely triturated manganese ore was better suited for precipitating iron than the coarse-grained or artificially made peroxide. He had heated Weldon mud to over 1,000° Fahr., and so rendered it anhydrous. In this state it was a hard cake, which had to be broken up before it could be treated for the purpose of "throwing down" the iron. When broken up the pieces were granulated, and were not by any means so easily treated as the precipitated peroxide of manganese. He considered the processes of the two patents identical.

Cross-examined by Mr. Moulton: When peroxide of manganese was spoken of the hydrated was understood. In 1882 the native ore would have been understood when peroxide of manganese was mentioned. As he read Spence's claim the peroxide only was included in the provisional specification

and the claim. There was nothing to show that the other oxides were included.

Mr. Watson Smith, Owens College, Manchester, confirmed generally the evidence of the previous witnesses.

Next day Mr. Francis Mudie Spence was the first witness. In conjunction with his father, Mr. Peter Spence, he applied for and obtained the letters patent that were now in question in this case. He and his father were, he believed, the true and first inventors of the invention for which the patent was applied for. Mr. Esilman, a chemist in their employ, was directed to make experiments on peroxide of manganese with a view to see if he could remove the iron. Mr. Esilman first used peroxide of manganese, but immediately after made a fresh experiment, using "Weldon mud." The result was a success. Witness was then examined as to the correspondence that had passed between his firm and the plaintiffs, and denied that he had used threats of legal proceedings. Cross-examined by Mr. Moulton, Q.C., he said that the threats, if they were threats, were made privately and without prejudice or malice.

Examined by Mr. Aston: He would not swear that the Weldon mud experiment was made before August 11, 1882.

Mr. Alexander Esilman described his experiments. He found Weldon mud do what was desired, and to the best of his belief he tried the mud experiment before the date of the patent.

Mr. John Glover, of Newcastle-on-Tyne, the inventor of the "Glover's tower," said he had read Spence's specification, and was of opinion that a person reading it could ascertain in what form to use peroxide of manganese.

Mr. S. M. Harrison, a member of the plaintiff firm, said in 1885 his firm entered into negotiations with Mr. Kynaston with reference to his invention and, finding that it was workable, they purchased it. The firm worked under that patent in September, 1885. They first heard of the defendants selling sulphate of alumina in January, 1886, and they accordingly bought a sample of it through a broker. They sent it to Mr. Norman Tate for analysis, and on receiving his report wrote to Messrs. Spence, complaining that they were infringing. Several letters then passed, and ultimately an interview took place at Manchester between the parties, at which Mr. F. M. Spence stated that they (the plaintiffs) were very foolish to have purchased Kynaston's patent, and that if they continued to work under it they would be liable to an action for interfering with the defendants' rights.

Mr. Moulton submitted that on this evidence a clear case of threat had been established outside of the correspondence, which was said to be privileged and without prejudice.

Mr. Aston, Q.C., admitted contingent threats. The defendants said to the plaintiffs if you do so and so *in futuro* we shall take legal proceedings. This was a warning and not a threat.

His Lordship said he would decide the point as to the use of threats at once, as it might shorten the hearing of the action. He held that there had been threats used against the plaintiffs within the meaning of section 32 of the Act of 1883, and that Messrs. Kurtz & Co. were justified in bringing their action on that account. The point remaining to be decided was that of the validity of the defendants' patent.

The hearing was again adjourned.

The case was resumed on Saturday, December 10, Mr. Esilman being recalled in order to show that experiments with Weldon mud were made before the date of the specification. Mr. Francis Mudie Spence was also recalled and examined with reference to certain letters which passed between himself and his father whilst the experiments were going on. Mr. Moulton then proceeded to open the case for Messrs. Kurtz & Co., and the Court adjourned until Monday, December 12.

COUNSEL'S ADDRESS FOR KURTZ & CO.

was resumed. In the course of his remarks Mr. Moulton said he should submit that Mr. Kynaston was the first true inventor of this invention, and that at a period anterior to the date of Messrs. Spence & Sons' discovery he took steps to obtain a patent for it. He submitted that Mr. Kynaston had worked at the matter for six months prior to that time, and actually applied for provisional protection a day before Spence. He went further, and would prove that at that time Messrs. Spence were not in possession of a substantial portion of their discovery. Messrs. Spence's claim was for the use of all the oxides, but the Court knew that only the peroxide was suitable for the purpose of the patent, and not the

protoxide. Moreover, they made no claim for the hydrated peroxide of manganese, without which the plan would not work satisfactorily, and from this he argued that their claim was either incomplete or bad.

His Lordship said he desired to put a hypothetical case to the learned counsel for his consideration. Supposing a man discovered an invention, and there was no question that he had done so, but he applied for a provisional specification for it, and the application was bad on some technical ground, such as not complying with the first or second sub-sections of section 5 of the Act, and supposing another man quite independently and quite honestly discovered the same invention, and applied and got a provisional specification in proper form, could the first man say that the second was not the first and true inventor?

Mr. Moulton thought that if the first man was wrong technically with his first application, and he then abandoned it and made a fresh attempt to get provisional protection, the second man in the interval having got a correct specification, the first man would not be the true and first inventor; but if the first man did not abandon his first application, but simply altered it so as to put it in proper form, then he (the learned counsel) took it that he would be the first and true inventor. In this case Mr. Kynaston duly made his application, and he failed to get his patent only because somebody applying subsequently got the seal first, so that Mr. Kynaston was unable to get his patent in time. He submitted that the defendants' patent was bad, because it claimed a process for effecting a certain object, which object it would not effect. He maintained also that the real inventor of Spence's process was Mr. Esilman, and in order to make the defendants' patent valid Mr. Esilman's name should have been given as the first and true inventor, which it was not.

EVIDENCE FOR THE PLAINTIFFS.

Professor Dewar said that for the purpose of this case he had made a number of experiments with manganese and its peroxide to test the efficacy of the defendants' process, and he maintained that the process could not be properly worked from the description given in the specification. At this stage the cross-examination of Professor Dewar was postponed to enable the defendants' scientific witnesses to examine and test his experiments.

Dr. R. Wright corroborated Professor Dewar's statement as to the fact that the more water there was in hydrated peroxide of manganese the more efficacious it was in removing iron from sulphate of alumina. He had proved this experimentally.

The case was continued on next day, when Dr. Wright was recalled, and stated that unhydrated peroxide of manganese would not separate iron.

Professor Dewar was then called, and in answer to Mr. Aston, Q.C., said that there would be some difficulty for any person reading Spence's specification, so far as related to the *modus operandi* of manufacture, to succeed in attaining Spence's object.

Mr. Aston: Suppose anyone were to take a sulphate of alumina solution containing iron, and were to add to it a preparation of oxide of manganese, would not the iron be removed from the alum solution? Witness said that it would depend upon how the oxide of manganese was prepared. Weldon mud would do it. It was the manganate of calcium and the manganate of manganese that removed the iron from the alum solution, and that was contained in the peroxide of manganese in the Weldon mud. There was nothing in Spence's specification to indicate that Weldon mud was to be used.

Mr. James Beveridge, technical chemist, Widnes, who was the next witness, in the course of his evidence also agreed that the manganese peroxide should be in the hydrated state in order to do its work well, and agreed with Professor Dewar that the action of Weldon mud in precipitating iron was owing to the impurities which it contained. He believed it was impossible to fully oxidise Weldon mud.

Mr. J. Wycliffe Kynaston, the patentee of Kürtz's process, described the experiments which he had made in 1882. In June of that year he found out that the use of peroxide of manganese absolutely would remove iron from the alum liquor. He had applied for his patent on August 10, and the matter as between Spence and him having been referred to the Attorney-General, Spence's patent was ordered to be

placed first in point of time. Messrs. Kürtz & Co. employed Weldon mud at their works according to his specification.

Mr. John Lucas, a former traveller in the employ of Messrs. Dagleish & Co., and Mr. Gilchrist, manager to Messrs. Spence & Co., deposed that the former had, on August 1, 1882, got samples of Weldon mud from his firm for Messrs. Spence & Co.

This fact having been brought out, his Lordship directed Messrs. Dagleish's diary to be sent for, and said that he would not give his decision until he saw it. Another witness having been heard, Mr. Moulton summed up, and the case was adjourned.

The case was resumed on December 14, when Mr. Moulton, Q.C., in continuation of his summing up of the plaintiffs' evidence, said he submitted that the complete specification taken out by the defendants was bad mainly upon two grounds, the first being that it did not describe and ascertain the manner in which the operation was to be performed, and the second that the invention was not useful. He maintained that the process as described would not work, and consequently the whole patent was invalid.

His Lordship remarked that the learned counsel's argument seemed to go to this—there being several things claimed, some of which were admitted to be useful, if it could be shown that one process named in the specification would not work, the rest were bad for want of utility.

Mr. Moulton: Precisely. The inability of any particular portion of the patent to work showed its want of utility. The learned counsel then quoted a number of decided cases in support of his contention that the specification must give sufficient explanation within the four corners of its sheets to enable the public to work it without making experiments. He contended that the defendants' specification did not do this, and that therefore it was bad. He also argued that Mr. Esilman, and not the defendants, was the inventor, and his name ought to have been associated with the Messrs. Spence in taking out the patent, in order to make it valid.

At this stage the diary of Messrs. Robert Dagleish & Co. was produced, and it was found that it contained an entry on August 8, 1882, to the effect that Lucas would require some Weldon mud shortly, but none was got on that date. Two days later (August 10) a parcel of the mud was despatched to Spence's works. His Lordship took this as proof that Mr. Esilman made no experiments with Weldon mud before August 10, but Mr. John Lucas was recalled in order to refresh his memory by a look at the diary, but this he refused to do. He was perfectly confident that he procured Weldon mud for Mr. Esilman between August 1 and 4, 1882.

Mr. Moulton then resumed his argument, submitting that he had proved that ordinary peroxide of manganese would not do what the Spences alleged, but that it required the hydrated peroxide as specified in Kynaston's patent.

Mr. Aston, Q.C., replied on the whole case. The learned counsel first of all dealt with the arguments on the other side as to the insufficiency of description in the defendants' specification. He submitted that Messrs. Spence's description of the process which they had protected was sufficient. He said if a patentee described certain means or agents to produce certain results, and gave a description to enable the means or agents (X) to be employed, and to obtain a result, say, of the value of 10, a man would infringe who had used agents like X and obtained with X, and with the analogues of X, a result of 5, or 2, or 1. In enunciating this principle Baron Alderson used this illustration—that the patentee had ploughed with the patentee's heifer, but had not ploughed so well. Secondly, he urged that it was a fallacy to say that a patent was bad because further experiment was required to determine the most beneficial means to be used when working the patent—experiment, according to all the decided cases, was permissible to determine the most beneficial means to be used. All the witnesses for the plaintiffs said every form of peroxide, native or artificial, would combine with the iron in some degree, and in some degree would throw it down; but then Professor Dewar and the others said if you take the native peroxides and use them in the proportions shown by the specification of Messrs. Spence, then so little iron will be brought down that the invention would not be beneficial commercially. In their experiments the defendants obtained results of from 10 to 40 per cent., and in every case a certain result was obtained. The failure of some of the agents to produce a satisfactory

chemical reaction would not invalidate the patent, because the patentee did, amongst a multitude of directions, inform the chemical public that a certain chemical reaction did take place. This sound legal principle was fully supported by the judgments of the courts in the *Badische, Otto v. Linford*, and that class of cases. The learned counsel then proceeded to treat Messrs. Spence's specification clause by clause, and in the course of his remarks said, by way of interjection: There is scarcely a case which comes before me in which I am retained to appear in support of a specification, but that I exclaim to myself, "Would that I had had this specification for five minutes before it was lodged!" I really, my lord, feel sore—

His Lordship: That you were not consulted. (Laughter.)

Mr. Aston: No, not me, my lord.

His Lordship: But I mean it. I am satisfied that if patentees would take the trouble and bear the expense of consulting gentlemen like yourself who are acquainted with drafting, and acquainted with the mode of expressing themselves in technical language, they would save themselves not a few pounds but many hundreds of pounds, and great risks into the bargain.

Mr. Aston: If specifications were so good that there was not a hole in them we should not be here.

His Lordship: Well, there is that consolation. (Renewed laughter.)

Mr. Aston then proceeded to deal with the question whether Messrs. Spence's claim was or was not too wide. He said the claim was for all artificially-formed and native peroxides, all of which would capture iron. Although he would like to revise the claim, yet he submitted that in accordance with the decisions it could be supported. He submitted that the plaintiff had failed in proving any infringement, and that the Messrs. Spence were entitled to a favourable judgment.

The case was then adjourned, and was only resumed on Wednesday, December 21, when Mr. Justice Kekewich gave his decision. During the trial he had, on the point of whether the alleged threats fell within the meaning of section 32 of the Patents, Designs, and Trade Marks Act, 1883, decided that the defendants had threatened the plaintiffs within the meaning of the section, and that the action was well founded in that respect. His Lordship now delivered a long judgment, and gave the plaintiffs 40s. damages. He also granted an injunction restraining the defendants from continuing the threats of which the plaintiffs complained, and ordered the defendants to pay the costs of the action, to be taxed on the higher scale. In the course of his remarks his Lordship said that he came to the conclusion upon the evidence that Messrs. Spence discovered the invention before Kynaston. He was further of opinion that Messrs. Spence had not given the public the information they were entitled to in the specifications with regard to the two methods.

FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

HYGIENE IN POLITICS.—President Carnot, in his inaugural message, incidentally spoke of hygiene. Some politicians stood aghast, others joked at the allusion. But the medical and pharmaceutical professions approve the President, while most people are of opinion that hygiene and cleansing would greatly improve politics.

THE FRENCH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCES.—The meeting next year is to be held at Oran, Algeria, on Thursday, March 29, a lovely season in that latitude, and the attendance is expected of some of the English scientists accustomed to spend their winters in Algeria.

THE SYNDICATE OF THE ROUEN PHARMACISTS have entered into an agreement with the Municipal Council, whereby for every wounded person brought into a pharmacy, and attended to there, the city is to pay an indemnity of 3f. for day and 5f. for night attendance. When the patient is able to pay, the city may afterwards collect the amount from him—if it can.

GENEROUS LEGACIES.—Among the many bequests made

by the late Mme. Boucicault, there is 100,000f. left to the Pasteur Institute. The Paris Assistance Publique, a body having charge of the hospitals and public charities in general, have been instituted the residuary legatee, a favour estimated to be worth about 10 million francs to the Paris sick and poor. M. Boucicault, the late husband of the lady just deceased, was in no way related, as some think, to the dramatic writer of the same name. He was a linendraper and fancy goods dealer, the founder of the Bon Marché, an institution dear to English and American ladies, where they speak their own language, pass their sovereigns or greenbacks at full value, and manage to spend much money generally.

THE VERSAILLES PHARMACISTS are models to be imitated. A year or two ago they entered into an agreement to stop cutting down prices and to abstain from advertising patent medicines. Engagements of the sort, often taken at social gatherings, are usually soon broken. But it appears such has not been the case with the pharmacists practising in the city founded by Louis XIV. They have lived up to their promise, and kept it to the letter, much to the benefit of all. Such success achieved by a body of twenty pharmacists in a city of 50,000 inhabitants is a subject for wonder and emulation; so they are now in receipt of many inquiries from other localities for the particulars of their plan, which they willingly communicate to all applicants. It is most likely the success is due less to the plan than to the pharmacists themselves, but certain it is that on coming from Paris, where pharmaceutically indecorous advertisements deface so many places, one is struck with their total absence from the highways and byways of Versailles. A few bills, not indigenous to the place, may be recognised from some shreds left hanging, but it is easy to see the stuff is removed systematically.

FIGHTING ABOUT CORN PLASTERS.—The "topiques de Bertrand aîné," of Lyons, are, it appears, plasters of some repute, commanding reasonable sales. J. A. Bertrand, a pharmacist, who held the copyright from his father and elder brother, sold it with the establishment to one Hantzer, when another Bertrand—not a man of straw, but a widow Bertrand—in partnership with Chollet, a pharmacist, began to manufacture and sell corn plasters of similar appearance. The only difference was that the labels bore the name, "Vve. Bertrand aîné." Hence a lawsuit, just decided at Lyons. The court held that defendants were wrong in so closely imitating complainant's goods, but that complainant was not altogether blameless, as he had sent threatening and mendacious circulars to dealers before a judgment had been obtained. In consequence defendants were enjoined from using the term "Bertrand aîné," even with the "Veuve" before it, and sentenced to slight damages and costs.

A WELL-RECOMMENDED FORMULA FOR VERMOUTH.—The Senate committee have, under the authority of Dr. Decaisne, published the following as the true recipe of these well-known bitters. It is barely necessary to say they do not recommend the stuff, but only quote it somewhat after the fashion of the "awful examples" so dear to temperance speakers.

Wormwood	4 oz.
Gentian	2 "
Angelica root	2 "
Blessed thistle	4 "
Calamus aromaticus	4 "
Elecampane root	4 "
Centaur leaves	4 "
Germander leaves	4 "
Nutmegs	No. 15
Oranges, sliced	No. 6
Alcohol of 85 degrees	9 pints
Sweet white wine	20 gallons

Macerate fifteen days and filter.

PRIZE FOR A CHEMICAL DISCOVERY.—The Senate Bill, passed at last session (and noticed at the time in *THE CHEMIST AND DRUGGIST*), offering a 50,000f. reward for a certain chemical process, has been concurred in by the House, signed by the President, and duly promulgated. The reward is offered for a simple, practical method for detecting in alcoholic liquids and beverages the presence of any substance other than pure ethylic alcohol. The Academy of Sciences has been entrusted with the duty of fixing the terms of the competition and awarding the prize.

TRADE **"SANITAS"** MARK.
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NON-POISONOUS, PLEASANT, AND BEST.

Used by more than 1,000 Boards of Health and Hospitals.

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THE WELL-KNOWN APERIENT MINERAL WATER.

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By reason of an improved method of caption, by which dilution is avoided FRIEDRICHSHALL WATER will be found now to be of CONSIDERABLY GREATER STRENGTH and EFFICACY than heretofore.

The ordinary dose is a large wineglassful (4 ounces) taken fasting. Most efficacious and more acceptable to the palate when heated or mixed with an equal quantity of very hot water.

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SEE ADVERTISEMENT, PAGE 44

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17/- per cwt., bag included, 18/- in 23 and 56 lb., 20/- in 7 and 14 lb. parcels.
1 lb. tins, 5/- per doz. Best Quality. No Oil Extracted. Carefully
Cleaned and Ground, so as to retain the natural colour of the seed without being
heated. G. S. MUMFORD, FARRINGTON ROAD LONDON.

WOODHALL SPA

BROMO IODINE MINERAL WATER.

The strongest known Iodine Water in the World.

This remarkable Spa has been purchased by a Syndicate of gentlemen who have determined to make more widely known the extraordinary curative powers of this spring, which contains more Iodine and Bromine than any spring in Europe—
"And, we may safely add, in any part of the World."—*Dr. Cusie, for many years*
late resident Physician at Woodhall Spa.

An analysis of the water having been made in November, 1886, by Professor Wanklyn, M.R.C.S., corresponding member of the Royal Bavarian Academy of Sciences, Professor of Chemistry, a very important discovery has been made, viz., the presence of Free or Elementary Iodine.

Dr. Wanklyn says—"So far as I am aware, this is the first instance in which free Iodine has been found in appreciable quantity in a natural water. For many years the Woodhall Spa has been celebrated as a valuable remedy in skin diseases. The fact that it is a solution of free Iodine is interesting in this connection, and well worthy of the attention of the medical profession."

The Woodhall Bromo Iodine Water is now being bottled at the Spring by the Sole Agents, BROMLEY & CO., Chemists, 233 High Street, Lincoln, 5 & 6 The Grove, Buxton, and at Woodhall. All communications to be addressed to them at the Spa, Woodhall Horncastle.

EDITORIAL NOTES.

MATERIA MEDICA NOTES.

SOME time ago Dr. E. R. Squibb called attention in *Ephemeris* to the curious manner in which the cocaine hydrochlorate of the same maker varies in quality, in so far as the United

Commercial States are concerned. It has also been frequently pointed out in this country that commercial cocaine hydrochlorate is not always of

the high degree of purity which such an important remedial agent should be. We pointed out (*THE CHEMIST AND DRUGGIST*, vol. xxx. page 297) that a most useful test whereby any one may prove the purity of the salt is that which was devised by Mr. Henry MacLagan, an American pharmacist. That test, according to its deviser, consists in adding one or two drops of solution of ammonia to a solution of 1 grain of cocaine hydrochlorate in about 2 oz. of water. If the hydrochlorate is pure, that is, free from amorphous alkaloid, there is, on stirring, an immediate precipitate, which in a few seconds separates into flocks of crystals, and these subside leaving the supernatant solution clear. We showed that it is better to use 1 oz. of water to 1 grain of cocaine, and that a sample of crude cocaine gave no precipitate whatever. The test is now recognised as a most delicate one, and is generally adopted. There recently came under our notice a case in which a chemist had reported to a manufacturer that the cocaine hydrochlorate made by the latter was impure. The manufacturer averred, however, that the hydrochlorate conformed to MacLagan's test, giving a perfectly clear solution with ammonia, and this he took as a proof that the salt was free from amorphous alkaloid. Our attention was called

to the matter, and we find that another manufacturer in Germany has reproduced the test in the following form:—

"To 0.1 gramme hydrochlorate of cocaine, diluted in 100 grammes of distilled water, 5 drops of liquor ammoniac Ph. B. are added. The solution should remain perfectly bright. (Mc. Lagan's test.)"

There is no mention here, it will be seen, of the separation of cocaine hydrate on the addition of ammonia, and it is rather a strange fact that on testing the product of this manufacturer we find it not to conform with his own test, but to the original one. We have tested other samples, and find that two of German origin quite responded to the modified test above quoted, affording no precipitate, one of them only giving a faint milkiness. Three other specimens gave immediate precipitates with ammonia, which in a few seconds became crystalline, and on subsiding left the supernatant solution clear. These were, therefore, pure; the first two were not; but we may add that when in the latter case the volume of water was considerably decreased a precipitate of an amorphous character was afforded. It is perfectly obvious that some manufacturers are working up to what they consider a standard of purity, which is really one of impurity. The result is that they produce a cocaine hydrochlorate which is very bulky, is in the form of micaceous scaly crystals, and dissolves readily in water. The pure hydrochlorates are much heavier and dissolve more slowly.

Several months ago we stated that a Dutch-Indian pharmacist of Samarang, in Java, had succeeded in extracting an essential oil from the leaves of the betel pepper (*Chariea Betle* and *C. Seribua*).

These leaves are extensively used by the natives of the Indian Archipelago and other Eastern countries as a wrapping for the betel-nut and gambier, which every man, woman, and child there uses as a masticatory. The leaves and fruit of the betel pepper are also used, like those of other chavicas, as medicinal remedies, but they had not been the subject of a pharmaceutical investigation until recently. We have received a specimen of the essential oil, and, on examination, find that it possesses the peculiar odour of the betel pepper leaf, which closely resembles that of long-pepper fruit. It is of a deep amber colour, and has a specific gravity of 0.943. It is soluble in less than its own volume of rectified spirit, and the solution is not disturbed by the addition of spirit up to ten volumes. With sulphuric acid the oil gives a coffee-brown colour, but perfect charring only occurs on the addition of a little nitric acid to the mixture. Nitric acid alone darkens the oil at first, it rapidly becomes—from reddish-brown—a dark-brown colour, and resinifies, the acid also being coloured brown. Hydrochloric acid alone has no effect upon the oil; but if a trace of nitric acid is added to the mixture the oil assumes a lilac colour. Dr. L. Rossbach, of Jena, in Germany, has tried the oil as a remedy for headache, colic, liver disorder, catarrhal affections of the mouth and throat, ulcers, and especially in cough. It has also been recommended in consumption. These are the disorders for which the leaf is prescribed in India; but according to the Dutch *Pharmaceutisch Weekblad* it has been found impracticable to employ the leaves in Europe, as they cannot be dried without losing their aromatic and stimulant properties. It is stated that essential oil of betel will ere long be included in the *Pharmacopœia Neerlandica*.

Under the name of *Princee Wood Bark*, there was offered at the drug sales last week a 50-lb. case of a bark received with a consignment of cascarilla and canella alba bark from the Bahama Islands. The bark rarely finds its way to Mincing Lane. The selling broker, indeed, was of opinion that it was quite new, and its bold appearance led him to imagine that it would be a rival to cascarilla, which it resembles somewhat

in taste and other characteristics. But the bark is by no means new to Mincing Lane; we remember seeing a parcel of the it some eighteen months ago, and we may say that by its name, copalchi bark, it has been very well known to pharmacognosists for at least a quarter of a century. It is in quills or partially-quilled pieces, of an ash colour externally and brown internally. The taste is bitter and aromatic. For a long time it was regarded as a cinchona (*Quina blanca* of the Mexicans), until it was ascertained that it was obtained from a croton. This croton was indefinitely put down as *Croton pseudo-China*, but *Croton niveus* is now regarded as its source. The late Mr. J. E. Howard examined the bark many years ago, and obtained a small percentage of an alkaloid from it. The bark is an aromatic tonic, and is used as such by the Mexicans in intermittent fevers. The tree is indigenous to the West Indian Islands, Central America, New Granada, and Venezuela. Although it resembles cascarilla, we have no use for it in this country, and previous attempts to introduce it have not been attended with success.

The last number of the *Kew Bulletin* brings the series for the year to a close, and looking over the list of Cubebæ, twenty-eight monographs which comprise the series, there is every evidence that the issue has been successful—so far, at least, as the value of the contents are concerned. There might be greater variety of subjects and more notes in each number. The present one contains eight notes. It would be very desirable to keep this number as the standard. The first note in the number is on cubebæ, which have lately become of considerable importance owing to the high price which the drug has attained. It is pointed out incidentally that the figure in Bentley and Trimen's "Medicinal Plants," which is given as from the Royal Gardens, Kew, has been proved to be *Piper Chabli*, Hunter (*Chariea officinarum* Miquel), belonging to the long pepper family. To the note is added a correct drawing of the plant (male and female), taken from a Java *Piper Cubeba* and one of Miquel's types in the Kew herbarium. A description of the plant is given, and it is stated that it is found wild only in Java, Sumatra, and Borneo. According to Descourtilz cubebæ were at one time cultivated as an introduction by the French in the West Indies, but at present they are unknown there. The produce of other species of pepper are sometimes called cubebæ, such as the fruit of *Piper borbonense*, which yields the native cubebæ of Mauritius (*cubèbe du pays*); and, as pharmacists very well know, the recent high prices of the drug have brought into the market all sorts and conditions of things which have passed as cubebæ.

USING DOCTORS' NAMES.

A CORRESPONDENT sends us the following question:—"A friend of mine," he says, "who had suffered from a bad cough, sought the aid of a leading London physician; the prescription he received had the desired effect, and cured him. The said friend has given me the prescription, and I wish to know if in advertising the cough mixture it would be legal to use the doctor's name." Simultaneously with this question came a report of a case heard in the Chancery Division of the High Court of Justice, in which Dr. John Williams, the well-known obstetric physician, applied by counsel to Mr. Justice Kay for an injunction to restrain Messrs. Hodge & Co., surgical instrument makers, from using his (Dr. Williams's) name in connection with a certain surgical instrument in their trade catalogue. Messrs. Hodge & Co. had been asked to withdraw the name and had refused, and this was an *ex parte* application to the Court. Dr. Williams had stated by affidavit that to so advertise his name as if he claimed to be the inventor of a very simple instrument was calculated to

injure his reputation, and to make him ridiculous in the eyes of the profession, and an affidavit from Sir W. Jenner in support of this opinion was also submitted to the Court. Mr. Justice Kay expressed very cordial sympathy with Dr. Williams, and intimated that if he followed his own unassisted judgment he should have readily granted the injunction; but he said there was the decision in the case of *Clark v. Freeman* bearing on this case, and that, as far as he knew, had never been overruled; he therefore did not feel at liberty to depart from the judgment therein laid down on an interlocutory application.

That case of *Clark v. Freeman* was a very singular one. The plaintiff was the late Sir James Clark, the eminent physician to the Queen, and the defendant was a chemist and druggist, who made and advertised some pills which he called "Sir James Clarke's Consumption Pills." Sir James Clark had acquired a special reputation in the treatment of consumption, and the indiscriminate use of these pills, which were found to contain mercury and antimony, he considered would be, in many cases of consumption, highly injurious. The wording of the advertisement was evidently intended to convey the impression that he was interested in, or had in some way sanctioned, the preparation and sale of these pills, and such an impression, if created, it was contended, could not fail to be highly injurious to him. There was no defence, but Lord Langdale, the then Master of the Rolls, while condemning the proceedings of the defendant, refused to grant the application for an injunction, on the ground that it had not been specifically proved that the plaintiff's profits had been diminished or any of his property injured. His Court had no power, he thought, to stay the publication of a mere libel.

That judgment, said one of the counsel for Dr. Williams, is not regarded as good law now—an opinion which may be a sound one. The question, however, is complicated with many others. There is first the point of the extent to which we may use our popular men. The names of the Duke of Wellington, Lord Brougham, Mr. Gladstone, and many others have been pressed into commercial service by bootmakers, carriage-makers, and bag-makers, most likely without any sanction of the originals, and it is difficult to conceive that they could have even a basis of action if they objected. The representations made were very different in Sir James Clark's case; and it is not at all improbable that such, if made at present, would render the manufacturer or vendor liable to punishment under the Merchandise Marks Act, if they could not be reached by other means. But it is evident that the reversal of Lord Langdale's judgment in such a case as *Clark v. Freeman* would not decide our correspondent's inquiry. A chemist might not be justified in using a physician's name in such a way as Sir James Clark's was used, but it would not follow that he might not use it at all without the original's consent. There are numbers of instances up and down the country where a particular form of pill, powder, or mixture has acquired first local and subsequently wider reputation under the name of its first prescriber. Many such preparations are proprietary. Can such a use of a physician's name be legally justified?

We do not propose to answer this question, for the simple reason that any answer we should give could not have any intrinsic value. But on the one hand we remember that it is now established law that the writer of a letter can under most circumstances prevent its publication, even by the person to whom it was addressed. That would seem to give a physician power to refuse to allow the publication in any form of his prescription. On the other hand the law could only look on a prescription for which the customary fee had been paid as the result of a commercial transaction, and it

would almost seem as if, in the absence of express stipulations to the contrary, the purchaser could do what he pleased with what he had bought. There is evidently a good opening for an interesting argument, if any physician and pharmacist will favour by fighting the question through; but meanwhile, as it is so evidently to the interest of chemists to encourage the writing of prescriptions, we should hope that the general practice of chemists will conform with the golden rule, which would call for the utmost consideration in all such cases as those we have alluded to for the wishes of prescribers.

INFECTION AND DISINFECTION.

THE report of the medical officer of the Local Government Board for last year, which we have lately received, is a bulky volume of about 500 pages, and contains valuable statistical and special reports regarding the more important epidemics of infectious diseases which occurred throughout England and Wales during the period covered by the report. Vaccination also receives attention at Dr. Buchanan's hands, that being one of the public duties which his department has to superintend. The latest returns of the vaccination officer show that neglect to vaccinate infants had rather increased from 1883 to 1884; in the former year the average was 5.1 per cent. and in the latter 5.5 per cent. for England and Wales while for the county of Leicester the figures were 21.7 and 23.5 per cent. respectively. Smallpox receives considerable attention in the report, the metropolitan area being chiefly dealt with in this connection. By far the most important and interesting report in the volume is that by Dr. Klein on the etiology of scarlet fever, which extends to close on fifty pages and is illustrated by a number of beautiful plates of the microscopic structure of the scarlatina micrococci, their cultures in nutrient media, and sections of pathological specimens infected by them. We have already referred to this investigation of Dr. Klein's in our last volume. It will be remembered that he traced a connection between scarlet fever and a disease of the udders of cows, and although his conclusions have since been disputed by Dr. Edington, the facts which he has elicited are undoubtedly valuable, and have a close connection with this common and fatal disease.

Along with Dr. Klein's scarlet fever report there are in the appendix three reports which are of unusual interest. These are a report by Dr. Wooldridge on the mode of action of pathogenic organisms, one by Dr. Klein on the influence of perchloride of mercury on organisms growing in nutritive gelatine, and another on chlorine, bromine, iodine, and sulphurous acids as disinfectants, by Dr. Cash. In all of these the anthrax bacillus, as being the most easily managed and cultivated of the virulent micro-organisms, is the chief actor. It is a bacillus which has helped to give lustre to the name of Pasteur, his study of it having enabled him to check the frightful mortality which occurred amongst sheep in France. By inoculating with an attenuated virus of anthrax he showed that sheep so treated became proof against the fatal complaint. Dr. Wooldridge's investigation, although little more than begun, is an important advance on this method and brings into notice an entirely new method for combating infectious diseases. He uses as a culture fluid for the bacillus, a solution of fibrinogen prepared from the testis of bulls and the thymus of calves or young oxen. Of either of these an aqueous extract is made with chloroform water, which is filtered, clarified by centrifugal action, and the dissolved fibrinogen precipitated by acetic acid; this precipitate is washed carefully to free it from acid and dissolved in weak alkali by the aid of heat. In this fluid the anthrax bacillus grows freely. Dr. Wooldridge made cultures of the bacillus in the medium,

and when a definite growth had taken place—which generally happened in two or three days, the incubator having a temperature of 37° C.—the fibrinogen solution was filtered off from the growth, and about 2 c.c. to 30 c.c. of it injected into the jugular vein of a rabbit. It was found that this caused no ill symptoms in the rabbit, but protected it from immediate or subsequent inoculations with anthrax. The fibrinogen solution in which the bacillus has not been cultivated does not afford protection. In all cases in which the changed solution was injected into the animals they were found to be proof against anthrax for a period extending to fourteen days. Whether the period of immunity lasts longer or not remains to be proved, but the fact acquired is sufficiently remarkable and important to warrant extended experiment, for it is obvious that the observations so far may have an influence upon our present views regarding inoculation for anthrax, smallpox, &c. Dr. Wooldridge's opinion is that the anthrax bacillus gives rise in the fibrinogen solution to a chemical substance or substances which confer immunity against anthrax. The substance is probably modified fibrinogen, and it is possible that it may be formed without the intervention of the anthrax bacillus at all, for it has been observed that a boiled fibrinogen solution confers temporary immunity. It will be seen that these results have a connection—though remote—with present views regarding the action of micro-organisms in producing disease. In scarlet fever, for example, it is not the organisms but the *products of the organisms* which induce the febrile symptoms. In Dr. Wooldridge's case it is the products of the anthrax which confer immunity against disease.

In a former report Dr. Klein has shown that perchloride of mercury is required in the proportion of at least 1 in 40,000 to prevent the growth of micro-organisms in nutrient gelatine. The investigations which brought out this fact seemed to suggest that a virulent organism (anthrax) cultivated in a mercurialised medium (not so highly medicated as to prevent growth) would become so far mitigated as to produce only a modified form of anthrax when an animal was inoculated with it, and so protect it from a subsequent inoculation with a fully virulent form of anthrax. The present report is based on experiments made to prove the truth, or otherwise, of this supposition. It is a fact well known to bacteriologists that the virulent micro-organisms with which they have to deal vary in potency. Dr. Klein used in his experiments bacilli which showed such difference, and he found that a fully virulent bacillus remained unaffected after two subcultures in the mercurialised medium, although at first retarded, but that a mitigated form of the organism gradually lost its virulence, although the peculiar morphological characters remained the same. The curious fact was moreover shown that this non-virulent bacillus became fully virulent when cultivated in a medium free from perchloride of mercury. This fact suggests an explanation of that change in the virulence of epidemics which is generally observed. An epidemic decreases, and ultimately dies off, but after a period of cessation it breaks out afresh and as virulent as ever. Dr. Klein's observation seems to show that this is because the worn-out infectious matter gets into a better feeding-bed, and so regains its normal strength.

Dr. Wooldridge's report may be regarded as one dealing with the prevention of disease without the intervention of antiseptics; in Dr. Klein's we have an example of the action of a disinfectant in mitigating disease germs, while Dr. Cash's report deals solely with the destruction of germs by means of the chemical agents, chlorine, bromine, iodine, and sulphurous acid. Dr. Cash has trodden well-worn grounds in taking up this investigation, Croix and Koch having before him shown the relative efficiency of the haloid elements as

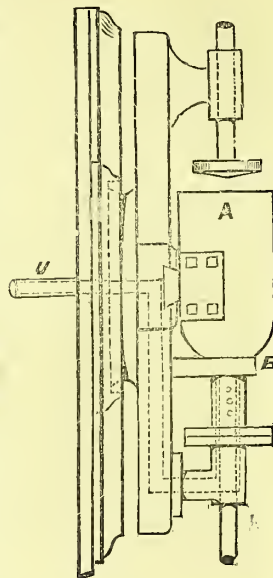
disinfectants; but he has imparted novelty to his investigation by employing these bodies in proportion to their atomic weights, as well as by employing them in solution and in the gaseous form. In all cases he used with a definite volume of anthrax or tuberculosis virus a measured volume of deci-, viginti-, centi-, or milli-normal solution of the element, noting both the influence of quantity of disinfectant and duration of contact with the virus. The destruction or otherwise of the virus by the disinfectant used was proved by inoculating an animal with it and noting the result. If it had no effect, then the virulence of the infective material was destroyed. The results appear to show another marked similarity—a similarity of difference, we may call it—between the haloid elements. It was found that they acted according to their atomic weights; thus 0.000035 grain of chlorine (=35.5) destroyed a fiftieth of a minim of anthrax blood in 5 minutes; 0.00008 grain of bromine (=80) did the same; and 0.000127 of iodine destroyed a thirtieth of a minim of the blood in five minutes. Less quantities of the disinfectants were ineffectual for the standard proportion of infected blood. It would seem that the iodine is the stronger, seeing that it destroyed a larger amount of blood; but Dr. Cash makes no allowance for the potassium iodide present in the iodine solution, and which would, no doubt, have a material antiseptic influence. The results, however, are sufficiently close to establish another relationship, viewed from their atomic weights, between the haloid elements. Dr. Cash also shows that these disinfectants are better used in the form of gas, and his results with sulphurous acid show that it is an active disinfectant of greater power than the haloid elements. He lays great weight on the necessity of having a large overplus of the disinfecting material, in order to allow for action between it and substances other than purely infective, which may exist in contagia, but this precaution is a well-appreciated one, the common plan when using disinfectants being to use them liberally. It is worth noting that this carefully carried out scientific investigation proves the correctness of a truth which has been arrived at without scientific guidance, namely, that chlorinated lime and sulphur fumigations are amongst the most valuable means for combating contagium.

GLASS BOTTLE MAKING BY MACHINERY.

LAST Friday, at the invitation of Messrs. Sykes, Macvay & Co. (Limited), a representative of THE CHEMIST AND DRUGGIST joined a party of about forty journalists bound for the firm's works at Castleford, in Yorkshire, to inspect a new machine for making glass bottles, which, if it should realise the expectations of the inventors, is destined to restore to this country an industry that has suffered heavily for many years from the competition of the low-priced labour of Germany and Belgium. It is claimed that out of an estimated average daily production of 46,432 gross of glass bottles this country only produces 6,206 gross, against about five times that number manufactured in Germany and Belgium. But it is anticipated that this state of things will be completely changed by the introduction of the bottle-making machine invented by a Yorkshireman named Howard Matravers Ashley. This gentleman, in conjunction with a friend, has made arrangements with the firm of Sykes, Macvay & Co., by virtue of which the latter will work his invention and manufacture both the machines and the bottles. Mr. Ashley, who personally conducted the party from their arrival at the Castleford Works until their departure in the evening, with excusable pride immediately showed his guests to the new machine, although many of them, to judge by their questions and observations upon

having its working explained, would have had their powers of comprehension greatly assisted had they previously obtained an insight into glass bottle making by the accustomed process. This method, which several of the party subsequently had an opportunity of inspecting, under the guidance of one of the partners in the firm, may be briefly described as follows:—The glass “metal” is heated to a semi-liquid state in large fire-clay pots of peculiar construction, into which one of the set of five hands required for turning out the bottles dips an iron tube about seven feet in length, collecting at the end of it such a quantity of the fused substance as will make a bottle of the size required. This first hand, technically known as the “gatherer,” hands the tube to the blower, who, blowing in it meanwhile, shapes it roughly into a conical form on a smooth sloping stone slab. The “metal” is next quickly placed by this workman into a small hole in the floor of the workshop, in which there is an iron mould divided longitudinally and hinged at the base, connected with a chain running upwards like a bell-pull. This the blower pulls, and thereby closes the mould round the heated glass. He then again vigorously blows through the tube until the embryo bottle has attained the shape of the mould, when by another tug at the chain it is released from the mould and handed to a boy. The latter, known as the “wetter-off,” by means of a moistened steel file or chisel separates the bottle from the tube and hands it to the fourth workman, whose share in the manufacture requires the greatest dexterity of all. It is his business to trim the ragged neck and add to it a ring or lip. This he accomplishes by means of an instrument known as a “punty,” a kind of four-fingered iron claw at the end of a rod, into which the bottle fits exactly, the four claws reaching just to the neck of the bottle. With the punty the bottle is pushed into a furnace and held there until the glass of the neck becomes soft. Then the “maker” applies some more molten metal round the neck, with which he forms the ring, and shapes it by means of a moulding tool called shears, consisting of a tongue fitting into the neck of the bottle, and two blades which are tightened round the neck. With this, while the bottle is being rapidly rotated with the tongue for its axis, he quickly shapes the ring. The fifth hand of the set then takes the bottle and places it with others into an annealing oven, which is heated to a very high temperature, and is allowed to cool gradually, two or three days being required for this purpose, when those that have withstood all tests and literally passed unscathed through the fiery furnace are ready for the market. The process above described, though followed with little deviation at all glassworks, has many evident drawbacks. One great disadvantage is the waste of glass metal, computed at something like thirty per cent. The bulk of this is, of course, collected again, but in remelting its quality deteriorates considerably. The blowing of the bottles is said to be an occupation almost as unhealthy as any in the manufacturing industries, although the blower, who at the time of our visit was turning out pickle bottles at an almost incredible speed, assured us that he had been following his occupation for nearly forty years. As about eighty-four dozen bottles are considered a fair day's work, and the men labour five days a week, it follows that this man must have turned out the extraordinary number of over ten millions of bottles, the strain upon his constitution represented by so many violent pulmonary efforts being almost incredible. The new bottle-making machine will, it is thought, put an end to all or most of these obstacles. The apparatus is so simple and yet, so far as can be judged from a casual visit and a necessarily superficial inspection, does its work so efficiently, that one marvels how such a simple idea can have so long

remained unappreciated. The accompanying sketch shows the principle which underlies Mr. Ashley's invention, and represents the machine as it is working at present, though several improvements have already been patented by the inventor, and the completed machine will probably be in working order early in the spring. The principal parts of Mr. Ashley's machine are a parison mould (A), which can be drawn into a bell by means of a lever, and hermetically closed, the halves being supported by two arms. To the mould is attached a movable end, connected with an air pump, by which a vacuum can be created within the mould. The molten glass is poured into the parison mould, which holds the exact quantity required to manufacture a bottle. Another mould, called the “collar mould” (B), which is placed at the bottom of the parison mould, serves to mould the lip of the bottle.



Air, forced by a pump which is connected (u) with the stand upon which the machine is supported, is introduced into the hollow central part of the mould, the molten glass being prevented by a button from entering the latter. The lip of the bottle is shaped first, and the mould is then quickly reversed, causing the molten glass to fall down by its own weight. When the mass has descended to the length required, the halves of the mould are closed on it, a current of air from the pump is turned on, and the bottle quickly blown into the shape of the mould. A different mould is, of course, required for each kind of bottle. The principal improvement which it is proposed to introduce into the machine now at work is to fix a number of machines—say four, six, or more—on a revolving stand, turning round as quickly as possible, one man being continually employed filling the moulds with the glass metal, another working the air-pump and closing the moulds, and a third taking out the finished bottles. The first result of the introduction of the perfected machines will be to diminish the number of hands employed, but as a large increase of orders is anticipated, owing to the impossibility of foreign competition, which now supplies this country with about 16,000 gross of bottles per day, or two and a half times as much as we ourselves manufacture, it is thought that the growth of business will quickly necessitate the employment of even a larger number of hands than are now engaged. The inventor of the machine claims that the producing capacity of Messrs. Sykes, Macvay & Co.'s works, if sixty machines were set at work (one for each “hole” now existing), would be increased tenfold, or from 5,400 to 54,000 dozen bottles per day, while, instead of 300, only 180 hands would be required, and the cost of labour would be reduced from 3s. 10d. to 3d. per gross. The exploiters of the patent propose to allow other firms to use the machine upon payment of a royalty, but all the machines will be made at the Sykes-Macvay Works, and duly numbered and registered. Mr. Ashley's partner in the patent, in the course of conversation, told our representative that, when they first asked permission from bottle manufacturers to put the invention to a practical test, they were everywhere

received with suspicion, and found all works closed against them. As it was impossible to obtain a proper supply of molten glass without the employment of expensive fire-clay pots, the erection of ovens and other preliminaries involving a heavy expenditure, it was resolved to use a mixture of molten shellac and rosin instead of the glass metal. The inventor then constructed an improvised machine in an empty blacksmith's shop, and there succeeded in manufacturing excellent bottles from the shellac and rosin mixture. These were shown to Messrs. Sykes, Macvay & Co., who thereupon decided to take the matter up.

Reminiscences of Jacob Bell. We have already quoted some of the contributions to pharmaceutical history which have been furnished by Mr. Frith, R.A., in his recently published very interesting reminiscences. Mr. Bell, it will be remembered, was a fellow-student with Frith, at Sass's school of art in Bloomsbury, and in giving his recollections of that school Mr. Frith tells the story of Bell's severance from the Society of Friends, which, it must be confessed, was not an episode which can be placed to his credit. "When Bell first appeared at Sass's, says Mr. Frith, he wore the Quaker coat; but finding the students showed their disapproval in a marked and unpleasant manner—such, for instance, as writing "Quaker" in white chalk across his back—he discarded that vestment, and very soon afterwards was himself discarded by the Quakers. His dismissal happened in this wise. At meeting the men sit on one side of the chapel and the women on the other. Bell disliked this arrangement, and, finding remonstrance of no avail, he disguised himself in female attire and took his place in the forbidden seats. For a time all went well, but a guilty conscience came into play on seeing two of the congregation speaking together and eyeing him suspiciously the while; he took fright, and, catching up his petticoats, he went out from meeting with a stride that proclaimed his sex. For this he was, as I have heard him tell many a time, expelled from the community." Everyone knows that Mr. Bell's acquaintance with London society was, like Sam Weller's, varied and extensive. Mr. Frith illustrates this in a curious manner when recounting the history of his "Derby Day," his most famous picture, which he painted for Mr. Bell. "The owner" (Mr. Bell), he says, "was very useful to me in procuring models. Few people had a more extensive acquaintance, especially among the female sex, than that possessed by Jacob Bell; and what seemed singular was the remarkable prettiness that distinguished nearly all these pleasant friends. I had but to name the points required and an example was produced. 'What is it to be this time?' he would say. 'Fair or dark, long nose or short nose, Roman or aquiline, tall figure or small? Give your orders.' The order was given, and obeyed in a manner that perfectly astonished me. I owe every female figure in the 'Derby Day,' except two or three, to the foraging of my employer. 'What kind of person do you want for that young woman with the purse in her hand, listening to that spoony fellow—lover, I suppose?' 'I should like a tall, fair woman, handsome, of course,' I replied. 'All right; I know the very thing. Been to the Olympic lately?' 'No.' 'Well, go and see Miss H—'. I don't know her. Hear she is charming always. Sure she will sit. You go and see her. I'll manage the rest.' The thing was managed, but the sequel of the story proved that Miss H. did not quite bear out the reports of her invariable amiability which Mr. Bell had heard of her."

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New London Universities. The movements which have been instituted by the Royal Colleges of Physicians and Surgeons and by the University and King's Colleges, to acquire powers to grant degrees, are being watched with close interest by all who take an interest in metropolitan education. These are two applications for charters based on essentially different principles, for the medical colleges are only examining bodies, while the other colleges named are teaching bodies. These applications have a close relation to the movement for a teaching university for London. In two lectures which Professor Henry Morley has recently delivered at the London Institution, the case

for a larger scheme than is contemplated by either of the charter-seeking bodies was very clearly put. Professor Morley lays it down that our first duty in education is to make cultured citizens, not trained examinees; therefore, he would associate together the Board schools, grammar schools, law and medical schools, institutions such as the Birkbeck, and the existing colleges, as a powerful educational unit. These he would associate with the London University, by allowing each school or college to appoint delegates or representatives to a council of the university distinct from the existing council. The duty of the new council would be to control education in a general way and to bring education and examination in close relation. He admitted that the London University, since its dissociation with the University and King's Colleges, had done good work, but he could not allow that it had done all that was possible in an educational sense. Referring to the application of the medical colleges, Professor Morley stated fairly the case for London medical students. It is hard on them that Edinburgh students should get a degree without greater labour than others have to give for a licence to practise, and the growth of London medical schools is also affected. Should the medical colleges get the charter they want, this hardship will be removed; but Professor Morley pointed out that a greater hardship will be imposed on the Society of Apothecaries, which fostered medical education and did much good work long before the colleges were heard of. It continues this work, and the General Medical Council has recently given it a new lease of life by completing its examining board for the full qualification necessary for registration. Were the colleges to get their charter the Apothecaries would be snuffed out; hence the society has appealed against the petition, and their appeal has been followed by one from the Durham University. It would be a much better thing if all the medical schools of the metropolis were to combine, as Professor Morley suggests, or that the teaching colleges only should get a charter in the meantime, for their proposal admits of the reception of all teaching bodies and all professions in the metropolis.

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The Seillans Flower Farm. In a recent report on the flowers and perfumes of Southern France, the United States consul at Marseilles gives some interesting particulars of the flower farm belonging to Mme. de Rostaing, at Seillans, in the Department of the Var. This plantation, it appears, may be taken as typical of the best undertakings of the kind in Southern France. It covers about twenty-three acres on the southern slope of the Maritime Hills, about 2,000 feet above the level of the Mediterranean. Prior to 1881 the land was used for olive growing, but the slope of the surface was so steep as to render irrigation difficult, and the land was regarded as practically worthless. In 1881 the olive trees were removed and the land prepared for flower-culture. First, the ground was dug up to a depth of four feet, the larger stones removed, and built into sustaining walls for the terraces into which the surface was divided and levelled. Along the upper margin of each terrace a shallow ditch was cut, connecting with transverse channels, which supply the spring-water for irrigation. The abruptness of the slope will be indicated by the fact that, on a tract of 18 acres, the terrace walls required to produce a series of level or gently sloping surfaces are 2,166 yards long. Thus terraced the tract yielded 17½ acres for planting. In 1881, 45,000 violets and 140,000 roots of white jasmine were planted, and in the following spring the remainder of the ground was planted with roses, geraniums, tuberose, and jonquils, and a laboratory erected for the manufacture of perfumes. The location proved to have been well chosen, the flower-plants grew vigorous and strong; and in 1885, the fourth year after planting, the farm, which had previously yielded a rental of 23*l.* a year, produced perfumes of the value of 8,630*l.*, and gave a net profit for the year of 1,533*l.* 16*s.* The principal conditions essential to the success of flower-farming are: First, an altitude of 500 to 2,000 feet above sea-level, flowers grown in that zone being richest in perfume; next, a soil rich in calcareous elements; thirdly, a situation sheltered from cold northern winds, and not subject to the white frosts which in spring and autumn affect the damp lowlands. In countries like Southern France, where the rainfall is always scanty, and often wanting entirely from May to September, irrigation is also necessary.

Pharmaceutical Society of Great Britain.

BOARD OF EXAMINERS FOR ENGLAND AND WALES.

THE board met on December 15, 16, 20, 21, and 22, when the following were examined and certified for registration as

PHARMACEUTICAL CHEMISTS:—

Cowper, Joseph, Penrith
Dickson, John, Dumfries
Elsdon, Herbert Wm., Wells, Norfolk
Goodfellow, Edward, Thrapston
Milbank, Sydney Thomas, Bishop
Stortford

Metherell, John, London
Millard, Edgar James, Derby
Péroudeau, Edward Geo., Plymouth
Poole, Weston, Newcastle, Staffs.
Shera, Wm, Arthur, Horncastle
Sugden, Samuel, Newchurch

The following also passed the Minor examination, and were certified for registration as

CHEMISTS AND DRUGGISTS:—

Anstin, Wm. Hosking, Devonport
Ayre, Henry, Dartington
Baker, Hy. Whitmore, Colchester
Batty, Geo. Arthur, Gt. Driffield
Beek, John Wilson, Morecambe
Bowden, Francis Henry, Manchester
Bowen, Fredk. Tamerlane, Rye
Brookes, Joseph, Northwich
Brooks, Hy. Jas. Robert, Oxford
Brown, John, New Wingfield
Bulmer, Bethel, Pickering
Callam, Wm. Eggleton, Ilford
Casewell, Job Parry, Market Drayton
Castle, Jno. Wm., Durham
Chaston, Alfd. Edwd., Winchester
Chaston, Wm. Robert, Norwich
Coombes, Geo. Jno., Nottingham
Cooper, Chas. Thos., Southampton
Cooper, Jno. Jas., Castletown
uff, Joshua Harcombe, London
Curtis, Wallace Edwd., Hatch Beauchamp
Davis, Chas., Leamington
Davison, Daniel, Cromer
Davison, Jas. Richardson, Alnwick
Dowling, Robert, Reading
Forster, Jno. Robert, Blyth
Franklin, Alfd. Jas., Brighton
Frayne, Alfd., Stonehouse
Gardner, Joseph Sam., Daventry
Gibson, Geo. Wood, Whitby
Green, Fred., London
Green, Walter, Hendon
Hampson, Wm., Leigh
Hanson, Arthur, Queensbury
Hersant, Milton, London
Hurn, Albert Joseph, Bristol
Hyslop, Hy. Tattersall, Stockport
Jones, Jno. Morgan, Brechfa
Keene, Bernard, London

King, Lawrence Wm., Hull
Kingston, Wm. Rich., London
Lovegrove, Wallis Sheffield, Crawley
Mackridge, Wm., Barnsley
Masterman, Francis Jno., Driffield
Mills, Chas. Thos., Shipston-on-Stour
Morgan, Wm. Jno., St. Clears
Morris, David, Kidwelly
Muskett, Fredk. Jas., Newport Pagnell
Osborne, Jas., Bridgewater
Pain, Percy, Cambridge
Pattison, Sidney, London
Pennington, John Noble, Ulverston
Plews, Harry Wm., Bedale
Pond, Wm. Ernest, London
Prior, Jas., Dewsbury
Ralph, Wm., Nairn
Rees, Colin Atkins, Dartmouth
Reynolds, Philip, Spalding
Roberts, Jas. Fredk., London
Robson, Tom Wardhaugh, London
Routley, Edwin Walter, Bath
Ryall, Fredk. Jno., Devonport
Sandbrook, Jno., Market Drayton
Saxby, Austin Clare, Leominster
Seobell, Herbert Wm., London
Smith, Edwd. Gibbs, Walton-on-the-Naze
Spry, Richd., London
Stapleton, Fredk. Wm., Sheffield
Theckston, Jas., Ulverston
U'Ren, Wm. Condy, Liskeard
Watkinson, Edwd. Wade, Bradford
Weston, Geo., jun., Sleaford
Wilcock, Fred Anderton, Bradford
Wilkinson, Jno. Hy. Varley, Wakefield

NORTH BRITISH BRANCH.

AN evening meeting was held in Edinburgh on Friday, December 16, Mr. John Nesbit in the chair. There was a fair attendance, consisting chiefly of younger members. After the usual preliminaries the Assistant-Secretary read a note on

LIQUOR FERRI HYPOPHOSPHITIS COMPOSITUS, B.P.C.

By Adam Gibson, F.C.S.

Six years ago the author communicated to the branch a working formula for this liquor, which differed somewhat from that adopted by the Formulary committee. He now stated that the editor of THE CHEMIST AND DRUGGIST had pointed out that the committee is undecided as to which is the better process for preparing ferrous hypophosphite, that by double decomposition with ferrous sulphate and calcium hypophosphite, or that by dissolving ferrous carbonate in hypophosphorous acid. It was the former process which he had recommended, but with certain precautions, the non-adoption of which has made the formula for syrup of hypo-

phosphite of iron, B.P.C., objectionable. He therefore expressed his approval of the new formula for the liquor which, having only a small excess of free hypophosphorous acid, is not so liable to deposit as Churchill's liquor. It was also pointed out that the method given in the Formulary for preparing ferrous carbonate is not free from objection. The excess of sodium carbonate ordered is unnecessary and difficult to get rid of by washing. A much better plan for working is to dissolve each of the salts (ferrous sulphate and sodium carbonate) in a quart of boiling water, mix the solutions, stir well, and let stand to cool and deposit, then wash with cold water twice, by decantation.

In the discussion which followed the reading of the paper, Mr. J. B. STEPHENSON said he had frequently prepared the liquor from Mr. Gibson's formula. His difficulty had been that the preparation always precipitated.

Mr. MABEN remarked that of course no finality was claimed for the B.P.C. formula, and the committee would welcome any suggestions or improvements. He was pleased that Mr. Gibson had found the formula an improvement. The deposit could not be prevented, but he had found that there was not much of it, and, otherwise, the liquor kept fairly well. All similar preparations deposited after a time. The hypophosphorous acid had been reduced by half, with the object of obviating the precipitate. He admitted that it would have been better to have specified the quantity of water to dissolve the ferrous sulphate and sodium carbonate. The object to be attained was to get as dense a precipitate as possible in order to facilitate washing. He washed by decantation, as Mr. Gibson recommended. He might also mention another way for making the hypophosphite of iron, viz., with iron wire and hypophosphorous acid. The difficulty in this process, however, was that too much acid was required to get the iron dissolved in a moderate length of time, so as to prevent oxidation.

The CHAIRMAN thought they might take it as the opinion of the meeting that the B.P.C. formula was an improvement on its predecessors.

The next paper was on

EMULSION OLEI MORRHUÆ, B.P.C.

By Peter Boa.

The author had prepared this emulsion strictly according to the directions given, and the result was not satisfactory, the globules of oil being visible to the naked eye, and magnified 100 diameters they looked like peas. Various modifications were tried without appreciably better results. Mr. Conroy's suggestion to add a small quantity of gum acacia was also tried, and, although a better result was obtained, the globules under a power of $\times 100$ being like turnip and coriander seeds, it was found that on keeping Mr. Conroy's emulsion showed a greater tendency to separate, and signs of rancidity were soon apparent. The true B.P.C. "emulsion" showed no trace of rancidity. It was also shown that gum acacia in powder, if rubbed with water, gives a very acid reaction, and that fresh mucilage is acid; but tragacanth powder is only faintly acid, and freshly-made mucilage the same. It is possible, therefore, that the strongly acid tendency of the acacia may hasten rancidity. He was of opinion that the B.P.C. formula has good points about it. The emulsion is easily made, inexpensive, and it keeps well. Nevertheless he came to the conclusion that a really satisfactory emulsion could not be made with tragacanth. The globules were visible to the naked eye. In making an emulsion he preferred to prepare the mucilage first, and gradually add the oil. He thought 75 per cent. of oil a reasonable proportion, and he had been able to make an emulsion with 80 per cent. He thought a method that would give good results might be devised on the lines of the B.P.C. formula.

Mr. MABEN said there could be no doubt whatever that the preparation in question was an emulsion, although the globules might be big. It would undoubtedly keep good for a year, and he thought it unreasonable to expect it to keep longer. He did not understand Mr. Boa's objection to tragacanth, because operating in a different way he got a fair result.

Mr. HILL remarked that the presence of the chloroform might cause rancidity.

Mr. FRED STEPHENSON corroborated this observation. Chloroform in his experience bleached the oil and favoured

rancidity. The chloroform in the Conference formula would have an opposite effect to what was evidently intended.

The CHAIRMAN entirely agreed with Mr. Boa, that the process was not one by which a good emulsion could be made. It was his experience that what could really be called a good emulsion could not be made with tragacanth. He had succeeded very well with acacia. Acacia dissolved as it were, while tragacanth seemed only to swell out. Perhaps that might account for their different action on oils.

Mr. C. F. HENRY agreed with what Mr. Boa had said. The product of the formula could not be called an emulsion—it was merely a suspension of the oil.

The next paper was on

TINCTURE OF QUILLAIA.

By Peter Boa.

This paper was supplementary to the one published a month ago (THE CHEMIST AND DRUGGIST, November 19, page 635). The author had continued his investigation, and with the assistance of Mr. J. R. Hill had made determinations of the percentages of extractive matter, saponin, &c., in the three tinctures. The following are the results of the extractive determinations:—

B.P.C.	tincture gave	0.70 per cent.
Proof spirit	" "	2.5 "
Water 7, spirit 3	" "	2.0 "

The percolates from the marcs of the B.P.C. and proof spirit tinctures gave 2.16 and 0.80 per cent. respectively of extractive. Saponin was determined by boiling 10 c.c. of each tincture with hydrochloric acid, the separated substance carefully washed and dried, and the glucose in the filtrate estimated with Fehling's solution, and the percentage of saponin calculated therefrom, with the following results:—

Sapogenin	Glucose	Saponin
0.11 per cent.	0.471 per cent.	0.773 per cent.
0.25 "	1.087 "	1.783 "
0.24 "	0.926 "	1.519 "

10 c. c. of each of the residue percolates were treated in the same way, and the following results were obtained:—

	Sapogenin	Glucose	Saponin
Rect. sp. residue percolate	0.20 per cent.	0.60 per cent.	0.985 per cent.
Proof " "	trace	0.025 "	0.041 "

From these results it is obvious—

(1) That the proof spirit practically exhausts the bark.
(2) That the percentage of saponin in the original rectified spirit tincture and in the percolate from its marc, added together, give a total according with the values of the other two tinctures.

(3) That the rectified spirit only half exhausts the quantity of bark ordered in the B.P.C. formula.

The author pointed out that the figures for glucose and sapogenin do not quite correspond relatively, but the determinations were made by approved methods, and are given for what they are worth. It was pointed out that the percentage of sapogenin contained in the proof-spirit tincture indicates 8.13 per cent. of saponin as the value of the bark used; further, that the weaker spirit tincture had deposited, owing to the deficiency of spirit. In conclusion, the author again called attention to the unsatisfactory nature of the B.P.C. formula as one for general use, and recommended that authority should be given for a proof-spirit tincture only, the formula for liquor picis carbonis being modified so as to include purified tar, quillaia bark, and rectified spirit, instead of purified tar and tincture of quillaia as at present.

Mr. DOTY said there could be no doubt that proof spirit or a weak spirit was the proper one to use.

Dr. RALPH STOCKMAN said that in reference to a decoction or infusion he fancied the soapy nature of the product would be objectionable for internal use.

Mr. MABEN pointed out that the formula in the B.P.C. Formula was only intended for making the liquor picis carbonis, and for that rectified spirit was necessary. He noticed that Mr. Boa's tinctures were very pale in colour. Some tinctures that he had made were brown. He had used the whole bark. For internal use a proof spirit tincture would be the best. Mr. HILL said that a decoction was inadmissible on account of the undoubted decomposition of the saponin by heat. He noticed a change going on in evapo-

rating some of the tincture. It had been stated that the bark contained sugar, but he did not think that it contained any appreciable quantity.

The CHAIRMAN thought the inner bark only should be used, and then the tinctures would be pale in colour.

The last paper was on

TINCTURA IODI DECOLORATA, B.P.C.

By J. Rutherford Hill.

This was a long and exhaustive paper on the pharmacy and chemistry of the tincture. Colourless tincture of iodine was first introduced about twenty-five years ago, by Sir J. Y. Simpson, his formula being 2 parts of tr. iodi P.E., and one of liquor ammoniac. The B.P.C. formula is, apparently, Curtman's reduced to one-third of the strength by the addition of rectified spirit. Since the publication of the Formulaire there has been considerable grumbling regarding the formula, as the tincture varies greatly in the rate of decolorisation. The author, therefore, took up the subject, the first points which he settled being the relative effects of heat and light. For this purpose the following mixtures were made:—

1. Iodine, 40 gr.; S.V.R., 5iv. m25; solution of ammonia, 5j.

2. A tenth of the formula quantities.

These were kept at a temperature of 24° C., and not exposed to direct sunlight.

3. Same as No. 1, and 4 same as No. 2, were exposed to direct sunlight at the ordinary temperature.

Within five days there was no free iodine in No. 2, but No. 1 was only completely decolorised in seven days. After twenty-two days the others contained free iodine, thus showing that heat, and not light, is the active agent in effecting decolorisation. It is also noticeable that it is better to add the whole of the spirit at first, and not in two portions as recommended in the formula. The author had also proved that if the whole of the ingredients be carefully heated, in a closed bottle, at a temperature of 90° C., combination, which usually takes about a week to complete, is finished within half-an-hour. It was pointed out that ammonia is in large excess in the tincture, and that half the amount gives a preparation which does not stain the skin.

The author next referred to the chemical components of the tincture. On this point there is considerable difference of opinion amongst authorities. Iodide and iodate of ammonium are commonly given as the principal constituents, but Darling has shown that iodoform is formed by the interaction of ammonium hypoiodite and alcohol, consequently that it exists in the tincture. Hager mentions triethylamine and ethyl iodide as constituents. The author treated experimental tinctures for iodoform by diluting them with water and washing out the iodoform with chloroform. The following are the results:—

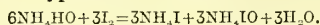
	Iodoform per cent.	Equivalent to Iodine per cent.
No. 1	0.10	0.097
No. 2	0.10	0.097
No. 3	0.09	0.087
No. 4	0.35	0.338

Nos. 1 and 2 are those above mentioned, but No. 3 was a tincture prepared at 90° C.; No. 4 at the same temperature, but with half the quantity of ammonia. The tinctures were twenty-one days old, and the percentages are based on the B.P.C. tincture. A fresh-made specimen of No. 3 was found to contain 0.2 per cent. of iodoform, thus showing that on standing the ammonia and iodoform interact, the iodoform thus gradually disappearing. Tests for iodates and ethyl iodide gave negative results. Quantitative estimations of the amount of iodine as iodide were made, with the following results:—

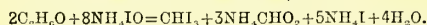
	Iodide of silver per cent.	Equivalent to Iodine per cent.
No. 1	5.4	2.92
No. 2	5.2	2.81
No. 3	5.4	2.92
No. 4	5.1	2.76

It will be found that these percentages, together with the iodine equivalents of the iodoform found account for the whole of the iodine used. The author next proceeded to explain the chemical reactions which occur in the tincture, and put forward the following as his theory:—

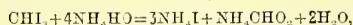
1. Iodide and hypiodite of ammonium are formed thus:—



2. The hypiodite reacts with the alcohol to form iodoform and iodide and formate of ammonium, thus:—



3. The iodoform reacts with the free ammonia to form iodide and formate of ammonium, thus:—



so that ultimately the tincture contains iodide and formate of ammonium, free ammonia and spirit.

In conclusion the author spoke of the therapeutic value of the tincture [which he believed to be *nil* so far as iodine is concerned, the free ammonia being the irritating ingredient], and he held the title to be a misnomer. *Liquor ammonii iodidi ammoniacus*, it might be called, and it might be made by dissolving ammonium iodide in a suitable mixture of spirit and water without fear of not getting the usual results.

Dr. STOCKMAN said that when applied some of the iodide might be absorbed through the skin, and in a small way produce the action of iodides. Iodine was applied externally more as a counter-irritant than as an absorbent, and the ammonia in the colourless tincture would probably act as an irritant. He thought that when iodine had to be applied externally on exposed places the best way was to use rouge or pearl powder to hide the stain. If the colourless tincture were not of much use, or if the strong tincture were rubbed off in the morning, they would not get much in the way of a result from their application.

Mr. J. B. STEPHENSON said he had always considered the colourless tincture a delusion. He had frequently smelt the odour of iodoform, but he only now understood the reason from what Mr. Hill had said.

Mr. BOA said that theoretically he never could see that the colourless tincture could have much effect. But since in practice people persistently asked for it, and he found the same medical men keep on prescribing it and finding no fault, he fancied it must be of some service.

Mr. MABEN said that as this was a preparation in regular use, it was desirable to have it uniform; hence the formula published by the B.P.C. committee. It was not for chemists to say whether this tincture were therapeutically active or not, but to supply it when wanted.

The CHAIRMAN said he agreed with Mr. Maben in the matter of having uniformity.

BLAUD'S PILLS.

A short discussion inaugurated by Mr. J. B. Stephenson took place on the formula for Bland's Pills. Mr. Stephenson considered the addition of glycerine and water absolutely unnecessary; the formula with the sugar was perfect. He considered the glycerine hastened oxidation. He found that gelatine-coated Bland's Pills became red on the outside where the coating touched.

Mr. BOA said he had not tried the Conference formula, because he got very satisfactory results in the same way as Mr. Stephenson. He had at one time used glycerine, but had given it up, as the pills became damp on the outside and were unsightly.

Mr. WILLIAM DUNCAN said he found the pills made with glycerine were difficult to keep in a presentable state. They retained the iron well, however, in the ferrous state.

Mr. MCGREGOR said he considered the formula perfect. He found the pills kept better in boxes than in a bottle.

Mr. C. F. HENRY had made several lots by the formula, and he considered them very good.

Mr. MABEN said no doubt varying results were obtained, but he thought that was not the fault of the formula. Potassic carbonate was liable to contain a varying percentage of moisture, and this might account for some of the difficulties. If the carb. potass. appeared moist the whole of the excipient should not be put in. He had obtained a very satisfactory mass himself with the formula, both as regards consistence and keeping.

The CHAIRMAN could not approve of putting in glycerine. The mass, in his opinion, was too soft without it.

Votes of thanks followed.

Specimens of all the B.P.C. preparations were shown on the table. The most of these were, we understand, made by Messrs. Evans, Sons & Co., and presented a most attractive appearance. Samples of different emulsions were exhibited under the microscope. Tea and coffee were served at the close of the meeting.

SHEFFIELD PHARMACEUTICAL AND CHEMICAL SOCIETY.

THE evening meeting of this society, held on Wednesday, December 14, was of a somewhat unusual character, and was essentially a "students' night." The proceedings were commenced in the laboratory, where the many students who attended were enabled to satisfy their physical needs before being supplied with mental food, by refreshing themselves with coffee and buns provided by the honorary secretaries, who appear to hold the opinion that an empty stomach is not an essential condition to the growth of the intellect. An adjournment to the lecture-room followed, and the chair was taken by Mr. Ellinor. Mr. Humphrey intimated various donations to the library and to the museum, and expressed his regret at having to communicate the fact that the president, Mr. J. M. Furness, had tendered his resignation to the council of the society, and apologised for the unavoidable absence of Mr. Newsholme from the meeting.

Mr. Ellinor, in some remarks made from the chair, was very sorry to find that the members in business took so little interest in the proceedings of the society. He thought that, considering the position they had attained, it was most discreditable that the work should be allowed to devolve essentially upon the younger men, whilst their seniors took the credit of it. However, he impressed upon the associates that it was they who furnished the real mainspring of the concern, and that so long as they attended, and encouraged those who organised the proceedings by their assistance and desire to benefit and advance themselves in their studies, the association would be carried on successfully. Referring to the president's resignation, he said that he personally regretted that Mr. Furness should have felt it necessary to take such a step, and considered that it was wrong that he should have taken it. Concerning the reasons for it he could say nothing, save that they appeared to him to be altogether insufficient. The president had enjoyed all the success and honour that were associated with the opening of the session, and now, having had all the gilt off the gingerbread, weakly left them in the lurch. (Applause.) He then called upon Mr. J. O. Arnold, F.C.S., to address them on "The Measurement of Starches."

By the aid of a coloured diagram, Mr. Arnold showed the different appearances presented by the more commonly occurring starches when viewed under the microscope by polarised light passed through selenite. The diagram also showed very clearly their relative sizes. First came *tous-le-mois* and potato-starch, oyster-shaped, and with a brilliant play of colours, the former having a length of about 110, the latter of about 80 micro-millimetres. Next came sago, with an oval form and a length of 50 mmm., and the starches of the leguminous group (beans, peas, lentils, &c.), with reniform outline and a length of about 35 mmm. The starches from the individual members of this last group were practically inseparable under the microscope. The starches of the true arrowroots were oval in shape, had a length of about 35 mmm., and were very brilliant under polarised light. The starches of wheat and barley were inseparable; they were circular, averaged 30 mmm. in diameter, and presented little play of colour with polarised light. Maize could be distinguished from wheat by the polygonal shape of the granules, and rye by its well-marked concentric rings. The starch of oats generally split up into a number of polygonal fragments. Tapioca much resembled the cereals, but gave a more brilliant play of colours with the polariser, and rice, the smallest of all the starches, had polygonal granules with a diameter of 6 mmm. Mr. Arnold afterwards gave a practical demonstration of the methods of measuring and examining starches.

In a note on "The sudden appearance and gradual extinction of certain species of plants in limited areas," Mr. G. A. Grierson recounted investigations which he had himself made, as well as the experience of others in the matter. It is to be regarded as an indisputable fact that plants do occasionally spring up in districts apparently foreign to them, such as in railway cuttings and other surfaces recently excavated. Where do the seeds for such plants come from? and why do the plants from them gradually die out in the majority of cases? These are the questions which Mr. Grierson addressed himself to answer. As regards the first, he pointed out that the evidence at present available is not sufficient for a conclusive reply, for although some of the seeds are undoubtedly windborne, others are so heavy that they must have existed in the soil, and been turned up during excavation. He thought that country pharmacists could investigate the matter. Interesting examples were quoted to show how seeds may travel over long distances, light on a fresh surface, give rise to a few seasons of plants, followed by their total extinction. Mr. Grierson has previously pointed out that a year or two ago he found an abundant crop of *Hyoscyamus nigricans* and *Sinapis alba* on a new road at Inchkeith (an island in the Firth of Forth). These have gradually disappeared, and inquiries have shown that the seeds must have been buried in the ground. It is possible for some seeds to remain in the ground for a long time without germinating, especially if they are deep down. The author argued this point at some length, and showed that the extinction of the plants is really due to the soil and environments generally being unsuitable for their growth. One very remarkable example of the favour which certain seeds have for fresh ground was given—viz. that of the fireweed of Tasmania, a species of *senecio*. This plant makes its appearance on patches of land which have been cleared by fire, and on these patches only. One case was mentioned of a burnt patch thirty-five miles in the virgin forest, and consequently that distance from the nearest *senecio*, upon which an immediate crop of the fireweed was produced.

A lively discussion ensued, in which Messrs. Ellinor, Watts, and Humphrey broached various theories, humorous and otherwise, in explanation of this botanical puzzle.

The next paper was by Mr. Thos. Dobb, who gave a practical demonstration of a simple method of estimating hydrogen peroxide by means of dilute sulphuric acid and a standard solution of potassium permanganate.

The usual votes of thanks followed.

BANKRUPTCY REPORTS.

Re ALBERT AUGUSTUS CURTIS, Gloucester and Sharpness, Chemist and Druggist.

AT Gloucester County Court, on Monday, the Official Receiver (Mr. C. Scott) applied to his Honour Judge Brynmor Jones for an order of committal against this bankrupt, for failing to attend his public examination. The Receiver said the debtor was adjudicated bankrupt nearly a month ago, but he had kept his creditors at arm's length. His first meeting of creditors was held early in November, but no statement of the affairs was presented, and the meeting was adjourned until December 12, the debtor being instructed to file a statement in the meantime. At the first meeting he said he could not be hustled. No statement was forthcoming at the meeting, and the debtor instead of being present attended a funeral in Nottingham. His Honour decided that he could not make an order of committal in the absence of an affidavit.

Re WILLIAM JAMES BADGER, 122 Allcroft Road, Haverstock Hill, and 161 Drury Lane, Mineral Water Manufacturer.

THIS debtor, who failed on his own petition on Nov. 7, applied on Wednesday to Mr. Registrar Giffard to pass his public examination upon accounts showing unsecured liabilities 505*l.* 13*s.* 9*d.*, and assets 14*l.* 1*s.* 3*d.* In the course of examination by the Official Solicitor, the debtor stated that he now carried on business as a mineral-water manufacturer, having originally started as a small retail dealer upwards of thirty years ago. He had not made any profit,

however, for the last four years. His business being for ready-money he did not require books of accounts. He had not been able to pay his way for upwards of five years, and could not have paid all his debts if called upon four years ago. He had a lease of the house in which he lived. In the absence of opposition, the examination was ordered to be concluded.

ALFRED JAY, 46 Fitzroy Street, Euston Road, Wholesale Perfumer.

ON December 16 a meeting was held, before Mr. Registrar Brougham, for the public examination of this debtor, who carried on business under the style of "Jay Père et Fils." The liabilities are 3,074*l.*, and assets 114*l.* After being part taken on that day, the examination was continued on the 19th. The debtor was examined by Mr. F. C. Willis, barrister, on behalf of creditors, and stated that he filed a petition in 1877, while trading under the name of Alfred Joseph. His liabilities at that time amounted to 32,634*l.* and his assets to 4,963*l.* The creditors received a dividend of 5*s.* in the pound. At the latter end of 1881 he again failed, under the style of "Alfred Henry Jay," and his liabilities were 9,660*l.* Shortly before the failure he had a fire at his premises, and received from the insurance company a sum of 6,000*l.*, all of which had been paid away to creditors. Under his failure his creditors received 9*s.* in the pound. He recommenced business in January 1882, but did not know what his financial position was. Twelve months afterwards he prepared a balance-sheet, which showed neither loss nor surplus. At the end of 1885 he was 200*l.* or 300*l.* short. He could not at the time have paid 20*s.* in the pound; but his sons were growing up, and he was in hopes that they would have been able to assist him in his business. The greater part of his liabilities were contracted in 1885. At the time of his receiving the 6,000*l.* he did not go into his affairs—every penny of the money was paid to his creditors. His London business was managed by his wife, and he travelled. He was proprietor of the business; his wife merely managed it for him.

The debtor was questioned at considerable length in reference to financial transactions. Afterwards he said he was first sued in July. After June of the present year his purchases were about the average purchases; the books would show what they were, and to whom the goods were sold and delivered. There was a parcel book identifying the goods sold with the ledger. He never took premises in Warren Square. In the commencement of September he was travelling and was taking orders. The only bought ledger he had kept was in the hands of the Official Receiver, and it contained entries of all the cash paid to Messrs. J. & M. Cohen by him. At the end of September he ceased to sell goods. By Mr. Beyfus: All the cheques which were drawn upon the banks for financial purposes had been paid. Cheques to the amount of 50,000*l.* had been passed through the banks. At the time of his previous failure the creditors were perfectly satisfied. When he received the 6,000*l.* in respect of the fire at his premises he did not pay any of it to Messrs. Cohen. His personal drawings amounted to about 600*l.* per annum, not including travelling expenses, which amounted to an additional 400*l.* or 500*l.* a year. He had lost money by employes collecting money belonging to him and keeping it. After some further questions the examination was ordered to be concluded.

NEW COMPANIES.

FLEETWOOD RUBBER WORKS (LIMITED).—Capital, 5,000*l.*, in 1*l.* shares. Object—to purchase the Fleetwood Rubber Works, Fleetwood, Lancaster.

HENRY MARKS & SONS (LIMITED).—Capital 50,000*l.* in 1*l.* shares. Object, to acquire and carry on the business of Henry Marks & Sons, sponge importers and chamois leather merchants, 45 Houndsditch, and Goring Street, London, E.C.

THE PHONOPORE SYNDICATE (LIMITED).—Capital, 90,000*l.*, in 1*l.* shares. Object—to establish and carry on the business of manufacturers of electrical batteries and other apparatus to be used in connection with certain patents.

Genesis of a Remedy.

I. CULTIVATION.



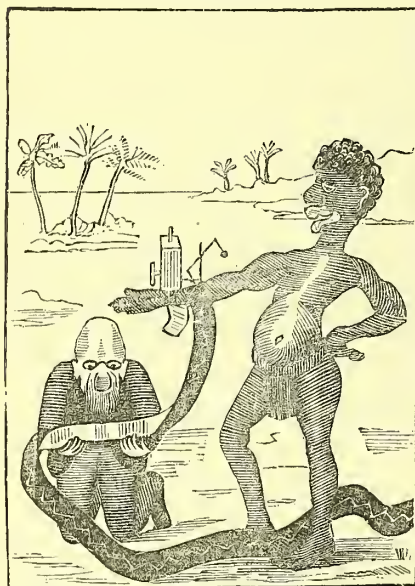
A MAN of culture rare you see,
Upon his native heath;
A child of nature proud is he—
The rotund figure, flashing eye,
The lip upturned, a century
Or more of birth proclaim. He walks beneath
The luxuriant foliage of a palm,
Round which the tough and winding stem
Of Afric's poison-plant, the dread Inee,
Grows serpent-like.—So botany
Informs us, not the picture.

II. PREPARATION.



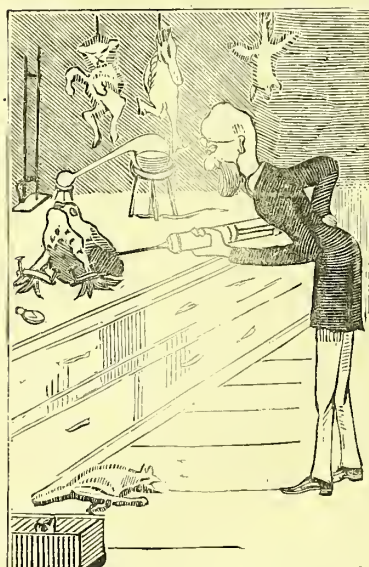
He—our friend in that scene and in this,
Is agent for a *Viaduction* house
His partner here, the lank and *Christyan* chieftain,
Doth a most pestiferous cudgel wield.
Death's paste his task; but Polly inquis-
itive lights upon the to and threats to *Komb[c]*
The nigger's wool. Eve's tempter's crawled—
To view the scene—from haunt and home,
And baleful eyes the poll upon the pole,
The winged seeds have fled the pot where mauled
They were in primitive pharmacy.

III. APPLICATION.



THE scene is changed again. Methought
I stood near some sub-tropic bathing place.
Not so. Our dusky friend the sage to engrave,
Has swallowed up the contents of the poison-pot.
Our red-nosed, gig-lamped friend supports
That which a sphymographic story tells
Of cardiac action. He—the sage—exhorts
The gods—the elassie, not the nigger's gods—to quell 's
Own fluttering heart, for he
Discovered has, a quite new remedy—
Strophanthus!

IV. DEMONSTRATION.



LAST scene of all—humanity's experimenting shop
Where frogs and eels, and dogs and guinea-pigs,
For man and on the altar of high science drop
Their little lives. He who philosophic eigs
Poor froggie so, a therapeuti-ti,
A "noble" man for "nobler" men he kills
The smaller fry. 'Tis he who eutest is
Of doctors. His *Kombé* dissertation thrills
The souls of 's fellows. 'Tis thus that we luvant,
In this advanced, enlightened nineteenth cent.,
The genesis of a remedy.

Personalities.

MR. F. J. MACNAUGHTAN, of New York, the United States representative of several British drug and chemical firms, arrived in Europe last week by the steamer *Celtic*.

THE OXFORD REFORM CLUB, comprising some six hundred members, have presented Mr. J. H. Jessop, chemist, High Street, with a handsome piece of plate in recognition of his services as honorary secretary.

THE business carried on by the late Mr. F. Lawrence at 383 Kentish Town Road for over thirty years has been transferred to Mr. Blount, of 51A High Street, Camden Town, who will carry it on as a branch. The transfer was conducted by Messrs. W. H. Taylor & Co.

Trade Notes.

MESSRS. THOMAS SYMINGTON & Co. have removed their London office to 1 East India Avenue.

THE directors of Henry Lamplough (Limited) have declared an interim dividend at the rate of 10 per cent. per annum.

MESSRS. F. SCHUTZE & Co., manufacturers of surgical instruments and druggists' sundries have removed from South Street, Finsbury, to 36A Aldersgate Street, E.C.

THE LIVERPOOL PATENT LINT COMPANY send us a handy calendar for office use. Each month has a large page to itself, and each day is prominently displayed.

MR. BEECHAM is now giving away a series of famous old songs, with full vocal and pianoforte score, as an advertisement for his pills. Chemists should try to assist in this interesting distribution, as the pieces of music are likely to be quite popular.

AMONG a chemist's stock of elegant luxuries some of the American perfumes, for which Messrs. Burroughs, Wellcome & Co. are agents, deserve a place. These are the "Florida Water" of Murray & Lanman, the "Cashmere Bouquet" of Colgate & Co., and the "Edenia" and other perfumes of Lundborg & Co.

PROFESSOR LOISETTE, the eminent instructor in the art of the scientific cultivation of the memory, is now advertising in this journal. From what has been stated of his system, there is not much doubt that a course of it would be of considerable value to pharmaceutical students before they "prepare for examination."

THE BOARD OF INLAND REVENUE have decided that the sale unstamped of Horsford's Acid Phosphate (excepting only when used for dispensing, as part of a medical prescription) shall not be continued, and the wholesale and retail price has been advanced accordingly, making the article now a 2s. 9d. one. It can still be obtained unstamped for dispensing purposes at the same price as heretofore.

THE SANITAS COMPANY (LIMITED) send us a circular in reference to the recent decision of Mr. Justice Kay, refusing to allow them to register the word "Sanitas" as a trademark in Class 3 (chemical substances prepared for use in medicine and pharmacy). They wish it to be understood that this does not imply that the word "Sanitas" is no longer their recognised trade-mark. The word is registered in Class 2 (chemical substances for sanitary purposes), and in many other classes. Moreover they retain fully their common law rights against imitations, and these as well as their registered trade-marks they are determined to maintain with the utmost rigour. In his judgment Mr. Justice Kay said: "If a man has used a word in connection with his goods which has come in the market to be known as a word distinguishing goods made or selected by him, he need not put that upon the register at all, because he then would have a right to prevent anybody using that word in connection with similar goods, and might obtain an injunction against them."

Obituary.

[Notices of Marriages and Deaths are inserted free if sent with proper authentication.]

CARTWRIGHT.—On December 7, Mr. James Cartwright, chemist and druggist, Hesse Street, Hull. Aged 87.

HORNER.—On December 7, Mr. Robson Horner, chemist and druggist, late of Victoria Dock Road, London. Aged 39.

HORTON.—On December 10, Mr. Samuel Horton, chemist and druggist, Meliden Road, Liverpool. Aged 41.

ROBERTSON.—Professor William Robertson, the Principal of the Royal Veterinary College at Camden Town, died suddenly on December 15, while sitting in his office at the college correcting proofs of a work he had written on veterinary surgery. He suddenly fell from his chair on to the ground, and before anything could be done for him life was extinct. The deceased gentleman was fifty-seven. Principal Robertson was a student of the Dick College, Edinburgh, and in 1852 obtained the veterinary certificate of the Highland and Agricultural Society, which entitled him to practise. He afterwards became a member of the Royal College of Veterinary Surgeons, and was in time placed on the Board of Examiners and on the Council. In Scotland Principal Robertson was best known as a practitioner in the Border district, while at Kelso he was twice offered the Principalship of the Dick College, Edinburgh, but he did not see his way to accept it. He was appointed to the Principalship of the Royal Veterinary College about six years ago. It was thought to be the change from the healthful district of the Borders to more sedentary duties in London which affected Principal Robertson's constitution. Two or three years ago he was seriously ill under a nervous complaint, and his condition then caused anxiety. In 1883 he published a work entitled "Equine Medicine," which is looked upon as a very valuable authority of its kind. Following his removal to London, he became intimately connected with the Royal Agricultural Society of England, and at its instance conducted scientific investigations, including the theory of inoculation as a preventive of pleuropneumonia, and into the causes of blackleg in cattle.

STEWART.—On December 19, at Ballymagarvey, Balrath, County Meath, Ireland, Balfour Stewart, M.A., LL.D., F.R.S., Professor of Natural Philosophy, Owens College, Manchester, aged fifty-nine. The loss of this eminent man of science will be universally felt. A man of great originality of mind, of indomitable perseverance and patience, he became what he was mainly through his own efforts. Professor Stewart was intended for a commercial career, and his education was based on that possibility; but while residing in Australia during his earlier years, his scientific mind found its bent, and he contributed several papers on physical subjects to the Royal Society of Victoria. Spectrum analysis afterwards had his attention, and some say that the discoveries of Gustav Kirchhoff were anticipated by Stewart, at all events that many of Kirchhoff's ideas were anticipated by him. His work on the absorption of certain of the light rays of the spectrum by means of plates of rock salt was rewarded by the Royal Society in 1862, when he was elected a fellow, and six years later he was the recipient of the Rumford medal. In 1870 he was appointed to the chair of Natural Philosophy at Owens College, having for ten years previously acted as director of the Kew Observatory. Professor Stewart has in the course of his life held many honourable appointments in scientific bodies, and was a writer of books, the best known of which to pharmacists is the "Elementary Lessons in Physics" of Macmillan's Science Series.

SUTTON.—On December 8, Mr. Charles William Sutton, pharmaceutical chemist, late of Stowmarket. Aged 54.

A MEMORIAL is to be erected at Köping, in Sweden, to Carl Wilhelm Scheele, the famous chemist and pharmacist. The contributions up till the middle of December amounted to 23,701 kronor (about 13,000*l.*), including donations of 5,000 kronor each from the town of Köping and the Swedish Pharmaceutical Society.

Trade Report.

Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., December 22.

THE drug and chemical markets have fallen into a condition of partial stagnation which will last for about a fortnight. Unless the unforeseen should happen (which is said always to be the case), we cannot look for any alterations of importance until January is well advanced. In the chemical trade sulphate of ammonia, soda nitrate, acetate of lead, and chlorate of potash are firm, soda crystals and cream of tartar slightly easier. Citric and tartaric acids have slightly improved this week. Camphor is very firm and presents every appearance of an impending rise. Sulphate of copper continues to rise in the same measure as the price of the metal is forced higher and higher by the speculators. Morphia is weak and neglected. Quinine and quicksilver are both unstable, with a tendency for lower rates, though apparently there are more people taking a rosy view of the former than of the latter article. The cinchona sales went off badly owing principally to the excessive eagerness of holders to realise, at the same time that they are exhorting the Ceylon people to refrain from spoiling the market by excessive shipments. Saffron is rising, and in certain varieties of East Indian gum arabic a brisk private business at high rates is reported. Shellac has slightly improved, and closes very firmly. Gambier is also a shade better. The auction sales of Central American indigo this week resulted in an advance of from 2d. to 4d. per lb., and since these sales Bengal indigo has also improved. Fine quality linseed is dearer, but Russian anise and Dutch canary seed have suffered a decline. Certain brands of glycerine are obtainable at a slight reduction. China galls sold at lower prices. Nearly all fixed oils are cheaper, but castor oil remains firm. The prices of China soy and Japan wax are not so well maintained.

MAIL SERVICE BY THE NEW CANADIAN OVERLAND ROUTE.—It is announced that mail steamers will leave Vancouver, the western terminus of the new Canadian Pacific Railway, on January 1, January 30, and March 6 next for China and Japan. Correspondence to be forwarded by these steamers should be superscribed "*Viâ Montreal*" and posted in this country about seventeen days before the departure of the steamers from Vancouver.

THE next cinchona auctions will be held on Tuesday January 17.

ACIDS.—*Citric* is a shade dearer, considerable transactions being reported for spot stuff. The nearest price may be put at 1s. 8d. *Ovalic* flat, at 4d. nominally. *Tartaric* steady, at 1s. 6½d. for foreign, and 1s. 7d. for English.

ANISE.—Supplies from *Russia* continue to pour in, and although the low prices have increased the consumptive demand, the market remains weak at last week's quotations. *Spanish* seed remains dear at 50s. to 55s. per cwt.

ANTIMONY remains very firm; *crude* Japanese, 21l. 10s. to 22l. per ton; *regulus*, 42l. to 44l.

CAMPHOR remains very firm, and the position appears to be a sound one. For *crude* Japanese, on the spot, 90s. is asked; but we understand that to-day the price of 90s. c.i.f. is wired from the East. Refined very firm at 1s. 2d. per lb.

CINCHONA.—The last auctions of the year, held on Tuesday, were extremely heavy, including as they did 8,719 packages of all varieties; 4,577 from Ceylon, 767 from India, 284 from Java, and 3,091 from South America. The large supply was caused by the anxiety of holders to take

advantage of the recent rise in values, but the result was very disappointing. At the opening of the auctions (though the last auction prices were unobtainable from the outset) a fair competition prevailed, but as the sales proceeded the tone grew languid in the extreme, and several parcels were bought in, holders not being prepared to accept the decline. The unit value averaged 2½d., being about ¾d. lower than at the preceding sales. The Java bark was mostly sold at rather cheap rates, but only two-fifths and less than one-third respectively of the Ceylon and Indian cinchonas were disposed of. The American barks, mostly *Cuprea* of old import, were nearly all bought in. The following prices were paid:—JAVA BARK: *Ledgeriana* branch, 2d. to 2½d.; ordinary thin quilly and small stem chips, 4d. to 6½d.; fair stem chips, 8½d. to 9d.; good, 11½d.: root, 10½d. to 11d. CEYLON and EAST INDIAN BARK: *Succirubra* branch, 1½d. to 3d.; ordinary young stem and branchy chips, 2d. to 3½d.; fair stem chips, 4d. to 5½d.; shavings, 4½d. to 8d.; fine, 10d.; root, 4½d. to 7½d.; renewed, 4½d. to 7d.; good to fine, 8½d. to 1s. 2d.; *Officinalis*, branch, 2d.; ordinary chips, 3½d. to 4½d.; fair to good stem chips, 5d. to 7½d.; shavings, 4½d. to 10d.; fine, 1s. 1d.; root, 8d. to 9d.; fine, 1s.; renewed, 7½d. to 10½d.; good to fine, 11d. to 1s. 5d. SOUTH AMERICAN BARK: Bolivian *Calisaya* quills at 9½d. to 1s. 2d., and *Cuprea* at 3½d. to 4½d. per lb. The principal buyers were the agents for the American and Paris makers, those for the manufacturers of the B. & S. brand of quinine, who a few days previously were soliciting orders for quinine at low rates, and the Frankfort-on-Maine factory. The English makers did not buy very much.

COCAINE quiet, at 9d. to 9½d. for German brands.

COPPER (SULPHATE) seemed slightly weaker at the beginning of the week, but since then the price has further advanced, 21l. 10s. to 22l. being now quoted for first mint.

GALLS.—*China* are lower, and have been offering at 62s. c.i.f. for arrival. Blue *Turkey* selling at 62s. 6d. on the spot.

GAMBIER firmer. Sales have been made of *block* at 23s. 7½d. per cwt. on the spot, and 23s. 6d. per cwt. for November-December shipment.

GLYCERINE.—Certain brands are quoted somewhat lower, 80l. for 1,260 s.g. from the makers.

INDIGO.—On Monday 522 serons *Guatemala* indigo were offered by public auction, the greater part consisting of new crop. All but a few lots sold at full prices and with fair competition, the better grades realising an advance of fully 2d. per lb. over the last public sale rates, while the lower qualities were occasionally as much as 4d. per lb. dearer. *Sobres*, ordinary to fine, realised from 3s. 9d. to 5s. 4d.; *Cortes*, good to fine, 4s. 4d. to 5s. 1d.; good ordinary to middling, 3s. 6d. to 4s. 3d.; ordinary to low, 2s. 11d. to 3s. 5d. per lb. Since these sales somewhat better prices have been paid privately for *Bengal* indigo.

IPECACUANHA.—Last Thursday our supplies were re-inforced by an arrival of fifty-one bags per "*Baffon*," from Montevideo.

LINSEED.—Fine qualities have again taken a turn for the better. *Holland* quotes 6d. to 1s. per quarter dearer, and other countries in similar proportion. *Dutch* is now 43s. 6d. to 44s. 6d.; *Sicilian*, 45s. to 46s.; and *Hungarian*, 40s. to 42s. per 424 lbs.

MORPHIA very quiet. We hear that a second-hand parcel was offered at 5s. 6d. per oz. and failed to find a buyer at that figure.

MUSK.—A case was received here this week per "*Chusan*" *viâ* Colombo. We have heard, though we have not been able to confirm, the report that two caddies of the fine thin-skinned *Tonguin* pods, for which 120s. was asked at the last auctions, have since changed hands at 115s. per oz.

OILS (FIXED).—*Castor* firm. *Cocoonut* *Cochin* somewhat easier, other varieties unchanged. *Cod-liver* nothing doing for the moment. *Cottonseed* lower, but closing better, *crude* 17l. 5s. to 17l. 10s., refined 19l. to 19l. 10s. *Linseed* easier 19l. 2s. 6d. to 19l. 10s. *Rape* lower, 24l. 15s., refined 26l. 5s. *Petroleum* dearer, 6½d. to 6½d. for American, and 5½d. to 6½d. for Russian spot. *Turpentine* unchanged.

OIL (OLIVE).—Our market remains very steady, although the volume of business is not a very large one. *Mogadore* oil is held here at 34l. to 34l. 10s., *Sicilian* at 35l., and *Spanish*, nominally, at 36l. to 37l. The following is the present position of the market in the producing countries: In Italy the harvest is in full swing on the Riviera, the crop is small and of inferior quality. The Bari crop is commanding high rates, the olives in that quarter being described as scarce and very deficient in oil. As a rule the arrivals at the Bari market amount to 150 tons per day at the height of the season, but on this occasion they are said to barely average 25 tons. The entries at Gallipoli continue on a small scale, say only about one-half of last year's, and at Taranto, Brindisi, and Rossano there are no entries worth mentioning, as the little oil offering in the interior is being bought up for local consumption at high rates. The hopes of the "bears" are now centred on the Gioja crop, where the bulk of the olives are still on the trees; but if this oil turns out satisfactory, a good portion of it will be required for home consumption and the Adriatic. The Sicilian crop is said to be good, although small in some parts of the island. As regards the Ionian Islands and Greece, the Corfu market is kept up by purchases for the Adriatic as eating oil. In Zante nothing has yet been done in new oil. In Asia Minor the market is firmly supported, and very little oil offers for export. In Candia also business with Northern Europe is checked by impracticable prices. In Tunis, under the influence of an Italian demand, the market has advanced. It is doubtful whether the crop will turn out more than a moderate one. Supplies from Mogadore are still withheld, and little is known as to how much will ultimately become available. The Spanish market is closed until new oil is ready for shipment, and, as the crop is short, prices are not likely to open low.

OPIMUM.—Nothing new on our market. The following are the latest reports from Smyrna, dated December 10:—At the beginning of the week there was a pronounced tendency on the part of holders to realise, and about 170 baskets changed hands at the parity of 10s 1d. per lb. for old *Karahissar*. For 40 cases new *Karahissar*, purchased and examined for the Dutch Government, 14s. 8d. per lb. was paid. All parcels offering being quickly bought up, holders adopted a firmer tone, and prices rose considerably, closing at 11s. 1d. per lb. for old and low-grade *Karahissar*, and 12s. 2d. for old *Bagaditch*. The market closed with an excited tone and irregular quotations, say 14s 8d. for new examined opium, and 13s. 8d. for old ditto. Advices from the interior, dated November 28, state that the sowings are progressing very satisfactorily. The arrivals at Smyrna on December 10 were 773 cases, against 3,775 last year same period. In our report last week the arrivals at Smyrna up to December 3, 1886, were given as 373 cases. It should have been 3,713 cases.

QUICKSILVER.—At the end of the week the price became firmer again, and business was done up to 10l. 17s. 6d. per bottle, holders asking 11l. Since then the market has weakened, closing at 10l. 12s. 6d.

QUININE.—A fair business was done at the end of last and the beginning of the present week at 2s. per oz. for German brands in bulk. The result of the bark sales has somewhat unsettled the market, though not yet to the extent which might have been anticipated from the fall in the crude material. To-day the agents for the *B & S* brand decline to quote a price. Other German makers still ask 2s. to 2s. 1d. nominally. *Howard's* 2s. 6d. bottles, 2s. 5d. bulk, *Pelletier's* 1d. per oz. less. The market can best be described as stagnant, with a tendency towards weakness, and 1s. 11d. as the nearest price for German bulk. It is said that the quantity of bark offered on Tuesday represented 600,000 oz. quinine, of which one-third was sold.

SCAMMONY.—The Smyrna market is reported very firm, with a brisk demand.

SHELLAC.—The market, after the close of our last report, opened very firmly with sales of *second orange* on the spot, TN up to 58s. On Monday prices advanced to 60s. for TN spot, and 67s. to 71s. for fine first blood *Button lac*. Second button also sold at 63s. per cwt. The closing quotations show rather more firmness, TN having sold on the spot up to 58s. 6d. per cwt., and *Garnet OCC* at 48s. 6d. For delivery a fair business at full prices.

SOY.—There is rather less demand, and 1s. 8d. per gallon would now buy good China.

WAX (JAPAN).—Nominally 60s. per cwt. is still quoted here, but the feeling of the market is decidedly weaker, and lower offers would, no doubt, lead to business. There are a good many parcels offering for arrival.

THE AMERICAN MARKETS.

NEW YORK, December 9.

DURING the week our market has continued active and excited. Speculation has developed to some extent, and a much firmer feeling is noticeable in nearly all the staple articles. The demand, which was drooping, as it generally does at this season, has greatly improved, and an unusual amount of business is passing.

The prices sterling (in parentheses) are what the different articles would cost delivered in London, all market allowances, discounts, &c., being taken into account. Importers can therefore see at a glance the course of this market compared with their own.

ANNATTO.—Seventy-five baskets arrived from Pará, but as there was no demand the lot was shipped to Europe; 31c. (1s. 5d.) would have bought.

OIL OF PEPPERMINT.—Our market for the H. G. Hotchkiss brand is nominally \$2.50 (11s. 6d.), but small sales are reported under this figure. A large quantity has been taken, it is thought, as a speculation, for there is little consuming demand, low prices appearing to offer no inducement. In Wayne County, Mr. Hotchkiss is the only buyer from the growers, there being no inquiry for bulk oil. The farmers have been hitherto holding for \$2.00, but they show signs of weakening; and as on the first of the year they always require money, it would not be a matter of surprise if very soon the price broke at Lyons, and, in the rush to sell, much lower figures have to be accepted.

OPIMUM.—The price of druggists' reached 12s. 3d. in case lots last week, and the market had every appearance of going lower. To-day the price is the same, although cable reports of large purchases for American account in Smyrna have been received. This has caused an uneasy feeling, and the opinion gains ground that before many days we shall see a sharp advance.

QUININE.—In the early part of the week the American manufacturers advanced the price of 1-oz. vials to 56c. (2s. 4½d., 5 per cent.), and it is thought by some that before long another rise will take place. Against this is the fact that although the small dealers and consumers did not buy largely at the low figures of a month ago, they appear to have good stocks, and are certainly not purchasing now. As the rise in price is therefore brought about purely by speculation, it remains to be seen whether those running the deal will be able to hold the bark and quinine market up till February next, when the large consumptive demand sets in. The quinine purchased here for European account is held in store, and will not be shipped to the old country. To-day, the nominal market price for prime German brands in bulk is 48c. (2s. 1½d., 5 per cent.), but there are sellers of round lots at 45c., and if the market went to over 50c. there are numerous speculative holders who would be very glad to realise.

MESSRS. BURROUGHS, WELLCOME & Co. have ready their 1888 Medical Pocket Diary, which forms a very suitable Christmas card for chemists to send to their medical patrons.

NUMBERING OF RECIPES IN HAMBURG PHARMACIES.—From the first of January next every recipe handed in for dispensing at a Hamburg pharmacy and entered in the recipe book must be numbered and dated and the corresponding number and date be inscribed upon the wrapper of the medicine. In the case of subsequent repetitions of the same recipe the date and number of the first dispensing must be repeated in the recipe book. The numbers must commence from one every day afresh.



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish.

Write on one side of the paper only; write early; and devote a separate sheet of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulæ consult the last volume, if you have it.

Letters, queries, &c., not noticed in this issue will, if possible, be attended to next week.

Liq. Ferri Hypophos. Co. B.P.C.

SIR,—I beg to point out an error which has found its way into the B.P.C. Formulary as published.

In the formula for liq. ferri hypophos. co. the amount of acid hypophos. should be 2 fluid oz. instead of 1 fluid oz. The earlier proofs gave the proportions for 10 fluid oz., and when the other ingredients were doubled it seems to have been forgotten.

It is suggestive that none of the critics have discovered the error.

I am, faithfully yours,

A. C. ABRAHAM.

87 Bold Street, Liverpool, December 20.

P.S.—This mistake should be a warning to dispensers, who are seldom aware how liable they are when making up a "double quantity" to fall into this error.

[It is not quite correct to say that the critics have not noticed the point to which Mr. Abraham refers. In one of our notes on the Formulary preparations we remarked that:—"In Churchill's own *liquor* there was 1 grain of free hypophosphorous acid in each fluid drachm, but the Formulary provides only for a fifth of a minim, nearly four-fifths of the acid being taken up by the iron. This is rather an improvement so far as taste is concerned." Since this was written time has shown that the smaller quantity of acid has considerably improved the keeping properties of the *liquor*. Mr. Abraham's letter seems to show, however, that the committee did not mean this. We may call attention to remarks on this subject in another part of this issue.—ED.]

Indian Ipecacuanha is Medicinally Active.

SIR,—The following report given to me by Mr. Hare, F.R.C.S.E., of Edinburgh, respecting the therapeutic action of the specimen of cultivated ipecacuanha which formed the subject of a recent note at an evening meeting of the Pharmaceutical Society, may be of interest as confirming the results therein recorded.

"I have tested the action of the Indian ipecacuanha fully in one case, comparing it with the ordinary powdered root of the Pharmacopœia, and found that its action is absolutely identical as regards effects in doses of the same size. The patient was a child (aged seven months) suffering from severe capillary bronchitis. In the usual sized doses (10 grains) for a child of this age your powder produced satisfactory emesis and gave relief. In minute doses subsequently administered the customary expectorant action was found to be present, and by alternating the use of the ordinary root with yours from day to day in expectorant doses, and also, where occasion demanded, in nauseant doses, it was found impossible to distinguish between the two as regards their therapeutic effects."

I am, yours respectfully,

Hitchin, December 19.

FRANCIS RANSOM.

The Irish Pharmacy Act.

SIR,—Somewhat reluctantly I must trouble you with another letter on the above subject, not only by way of reply to "Pharmacist," but of comment on the report of the last meeting of the Pharmaceutical Council. I fear the probability of an early and equitable settlement of the points in dispute will not be advanced by the remarks of the one or the proceedings of the other.

Glancing first at "Pharmacist's" letter (with its show of small wit worthy a schoolboy, as to the misdating of a former letter), the points raised therein are mostly answered by the formulated views of the Chemists and Druggists' Association, as recorded on page 766 in this week's issue of your journal. The remaining points will be noticed in connection with the following remarks on the proceedings of the Council.

"Another Dublin Chemist" is also referred for a reply to his query as to the "representation on the Council" required to the same page. The chemists and druggists will regard any payment demanded by the Council beyond the fees for examination and registration, unless such further payment carries with it the right to be represented directly on the Council, as a petty and vexatious grievance. Even if it were not so, the necessity for such representation remains.

Referring now to the report of the last meeting of the Pharmaceutical Council, I wish to express surprise and regret at the summary, and, indeed, discourteous, manner in which the recommendations of the Chemists and Druggists' Association were received. The Council simply ignored the moderate demands of the Association, and in so doing were not only lacking in courtesy, but were very unwise (in their own interests), reminding one of the proverbial ostrich, which buries its head in the sand to escape its pursuers. Do the Council think they can carry their Bill against the certain opposition of those whose interests it will infringe, whose status it is calculated to lower, both of which are apparently ignored by the Council? If the Council were even unanimous in these views, could they hope to succeed? How less likely they are when a considerable and influential number of their own body are opposed to their narrow-minded and selfish policy!

When the deputation from the Chemists and Druggists' Association waited on the Pharmaceutical Council on November 2 last, each of the four members of the deputation and the Mayor of Belfast, Sir James Haslett laid their views (by letter) before the Council. Their communications were of a non-official and friendly character, but they certainly contained the germs and essence of the recommendations afterwards put in proper form by the Association. These views propounded by the deputation seemed also to command the general assent of the Council, and the President, in handing the deputation a copy of their proposed amendments, said:—"I suggest that the members of the deputation should take these suggestions home with them and discuss them at the next meeting of this body, and any suggestions they forward to us we will be very happy to consider." The unintentional irony of this last phrase will be apparent in the sequel. The Association, therefore, appointed a committee to consider and report on the matter, and their report, having been amended and adopted by the Association, was forwarded to the Council as the ultimate decisions of the Association. How were these views and recommendations received? Why, the Council, with a kind of grim humour, practically stultified itself, by not considering the matter at all! but acquiesced in the cavalier style and words in which the President dismissed it, viz., "This is utterly inconsistent with what they (the deputation) gave us to understand. Better have it out of the way and have done with it." The recommendations of the Association may be briefly summarised as follows:—The public necessity for the two branches of the business, the consequent necessity of the continuity of the two grades; registration (without examination) of those in the trade before 1875; modified examination for all others in business; provisions for the registration of assistants and apprentices; recommendations as to the examinations in future; representation on the Council.

The other suggestions are of minor importance, and are in no way inimical to the interests of pharmaceutical chemists; but how could the President of the Council

venture to state that these recommendations "are utterly inconsistent with what they (the deputation) gave us to understand," when he does not attempt to support his statement by a single iota of evidence? Do not the following excerpts fully cover *in limine* the ground occupied by the recommendations of the Council?

Sir James Haslett recommended (in his letter) "the establishment of a second grade, and that assistants and apprentices should be considered." Mr. Rankin (secretary of the Association), confirming this, urged the necessity of providing "a Minor examination, by passing which they could obtain a legalised position without going up to a higher examination." "They never dispensed prescriptions, nor did they want to," Mr. Gibson said. "They (the deputation) thought that the Council had not realised the important fact that the two classes of persons were absolutely necessary, the one to do the finer work of filling prescriptions, and the other for the heavier and the rougher trade." "It was also unjust to demand that those who had served their time should, in addition, serve two or four years with a pharmaceutical chemist." "They met a public demand, . . . they therefore asked to be recognised and legalised. By so doing the Council would enlarge their own constituency, and increase the stability and usefulness of their society."

To any fair-minded persons these and other quotations should amply disprove the statement of the President. The whole tenour of the remarks of the deputation shows that their demands and the recommendations of the Association are identical in substance, though not in form.

This letter is already too long. The consideration of the amendments as now adopted by the Council will doubtless shortly be brought under the notice of the Association, which will point out with unsparing minuteness and oppose with vigorous hand the injustice of the position assumed by the Council.

Yours truly,

Belfast, December 20.

SAMUEL CLOTWORTHY.

SIR,—The fact is that there are a few members of the Irish Pharmaceutical Council who are doing their best to throw dust in the eyes of pharmaceutical chemists by stating that they will only recognise "*bonâ-fide* chemists and druggists," and are acting in direct opposition to the wishes of the majority of the licentiates. They are very well aware that the only "*bonâ-fide* chemists and druggists" in Ireland are those who were trading as such at the passing of the Act in 1875, and whom it would be very proper to try and register, so that their rights might be fully preserved. But what more claim to registration have those who have been acting illegally, in a bold and defiant manner, than the huxter in a back street who has been selling pennyworths of laudanum, paregoric, &c.? By all means register all "*bonâ-fide* chemists and druggists," but no pretenders to such a name, and I am sure there is no pharmaceutical chemist but will be happy to certify to those who were trading as chemists and druggists or druggists in 1875.

I also differ, as most pharmaceutical chemists will, from the opinion of the Council, when I say that it will be much easier to determine and register those of 1875, who have a proper legal claim upon them, than those of 1887, who have no claim, as their number will be smaller, and the Council will only be seeking powers to complete their original Act, without any alteration of dates. Of course by acting thus, straight and just, it will not yield the same golden harvest, which, no doubt, is a chief consideration, much more so than the protection of the public or their licentiates; still they must not be permitted to pitchfork those illegal vendors into legitimate trade, to the great danger of the public and injury of their licentiates, for the sake of "filthy lucre." It is to be hoped that they will desist in time from their headstrong efforts, for they have no right to squander the Society's hard gatherings to benefit illegal traders, and injure their own members with the funds they have subscribed. By doing what is right the Council will prove to their licentiates that they have their good at heart as well as the public's, and it will be a strong inducement for those who are not members to become so at once, by remitting their annual guinea; but let them go on as they have begun, and they will soon lose the few members they have, or put themselves out of office. I am sorry to say that this Council has never yet done any-

thing for Belfast, not even in defraying the costs of the late prosecutions, and how could they expect Belfast chemists to become their members? They would rather waste their funds in prosecutions in small country towns, for the benefit of nobody, and greatly to the injury of their Society. It has been demonstrated that under the present Act convictions can easily be carried against offenders before any unprejudiced bench; it would, therefore, be a hundred times better that the law remain as it is, than that an Act should be passed greatly to the injury of pharmaceutical chemists, and solely for the pecuniary benefit of a few wholesale gentlemen who are doing all the wire-pulling, that they may get these customers of theirs, who are illegal sellers of poisons, legalised. Had it not been for the vacillating action of the Council all these law-breakers in Belfast would have been put down by this time. Wherefore, it now becomes the first duty of all legitimate traders to combine and render such an opposition in Parliament as shall completely defeat this dangerous amending Act, unless the Council be immediately guided by the wishes of their licentiates, who will then give them a hearty assistance.

A BELFAST PHARMACIST.

SIR,—I was rather amused at reading last week's report of the Pharmaceutical Society of Ireland *re* their contemplated provisions for the chemists and druggists of that country, and with your kind permission I would ask space to notice a few points. First, they ask permission to register all "*bonâ-fide* chemists and druggists who were in business in 1875, or who had gone into business since 1875, up to 1887. Why not say up to the time the contemplated amendment may become law? Had "*bonâ-fide*" been left out, I could have understood this limitation, but as it now stands I cannot see how any body of sane men could expect to get permission to mete out one law to Peter and another to Paul, since both are on the one footing. Secondly, do the Pharmaceutical Council imagine, because there happen to be three gentlemen in Dublin content with the title "druggist," that this designation will suffice for all the "chemists and druggists" of Ireland? If so, they make a sad mistake. Thirdly, is the omission to pay 10s. 6d. annually to disqualify any registered druggist as a vendor of poisons, after having paid a fee for registration? This proposition I consider very shallow. Fourthly, the Pharmaceutical Council consider it necessary and expedient to meet the case of any of their pharmaceutical licentiates who may have more than one place of business, yet they forget to provide for any registered druggist who may desire to do likewise. Was ever such selfishness known before?

In conclusion, I cannot but think the chemists and druggists of Ireland are not such fools as their pharmaceutical brethren take them to be, judging from the two sets of resolutions laid before their Council, and I am quite sure in time they will find this out.

The promoting of a Bill on behalf of the chemists and druggists of Ireland was under consideration a short time ago in the North of Ireland Association, but was for the time laid aside in the belief that the Pharmaceutical Council had seen, after an experience of twelve years, that the continuity of both grades was a necessity to meet the wants of our country; but now, sir, it comes to light they think otherwise, and therefore I say to my drug brethren through Ireland, Let us be up and doing, and, since we cannot get justice from our pharmaceutical friends, let us at once promote our contemplated Bill, and show to the Pharmaceutical Council of Ireland that, if they will not know the meaning of justice, they can be taught it.

I am, yours obliged,

Belfast.

AN OLD CHEMIST AND DRUGGIST.

The Ulster Potters and the Dublin Clay.

SIR,—The recent rehearsal at the council meeting of the Irish Pharmaceutical Society will surely open the eyes of pharmacists throughout Ireland to the designs of the Belfast general traders. The amiable treatment accorded to the deputation, and the ready deglutition of their strong statements as to the inherited businesses and the abstention from dispensing, seem to have emboldened them to give the screw another turn, and the desire of their hearts seems to culminate

for the present in a series of "modifications," the sixth of which is specially worthy of attention. If this had been submitted in July, it would have been refreshing from its coolness; now it looks impertinent. Under it a claim is made that "five years' apprenticeship with a chemist and druggist where no dispensing is done shall qualify for examination as pharmaceutical chemist," the most important of whose qualifications is that of dispensing! Trust these Ulster traders to get value for their money! No fears of either "Wholesale Druggist" or "Wholesale Gentleman" giving 50% each, without receiving value, or more than value. They can give the Dublin folks several points, and beat them after all.

Yours respectfully,

A BELFAST CHEMIST. (17/221.)

A. Waterproof Varnish.

SIR,—Finding a parcel of zylonite combs brittle, and therefore unsaleable, I dissolved one of them in methylated ether and spirit of wine, and used the solution for waterproofing chip boxes, and for varnishing tin boxes. I do not know if these ingredients are the subject of a patent, but I think I shall find the solution a very useful one.

Yours truly,

HEDER.

Chemists and Aërated Waters.

SIR,—Some time ago you suggested that the aërated water business was a good line for some of the spare energy, and unfortunately spare time, of chemists in general; you put the case so forcibly and ably that the seed took root in this poverty-stricken country (Ireland), and the harvest came last summer. We are well satisfied with our venture, and even now are more than paying expenses, and this the first winter we have gone through. We owe you something for the good advice, without which we would have still been struggling on, only work enough for half the day. This new business takes a lot of learning, and is just the business to suit chemists who can take off their coats and work without losing any of their dignity. I may give more particulars about my experiment some other time if any of my brothers would like to have them. I am, yours

GRATITUDE. (213/65.)

MISCELLANEOUS INQUIRIES.

212/61. *Agricola*.—For brown hair dye, see page 410.

216/58. *Cochineal*.—*Gilding*.—This process is perfectly simple. First gold size is used as the adhesive agent, then the gold leaf applied and smoothed with a tool; finally the gilt surface is varnished with oak or copal varnish.

Glycerine and Cucumber.—Several correspondents ask for the formula for this preparation which was published in our last volume. It is as follows:—

White glycerine soap	..	..	..	½ oz.
Cucumber ointment	..	..	..	1 "
Distilled water	..	..	..	32 "
Ess. jockey club	..	..	..	½ "

Success in manipulating the ingredients to make a perfect emulsion greatly depends upon the nature of the ointment. Should it be unduly acid, the emulsion separates sooner or later; but this may be remedied by the addition of 2 drachms of borax. The mode of operating is as follows:—Shave the soap into shreds and dissolve (in a large mortar) in 3 oz. of hot water, to which the borax, if necessary, has been added. Now add the ointment, and stir well until thoroughly incorporated; then add 15 oz. of the water, ounce by ounce, so that each portion is incorporated before another is added. Lastly the perfume and the rest of the water. The latter part of the operation may be conducted in a bottle.

213/16. *Winter*.—Please send us a sample of the article for which you wish a formula.

213/65. *Gratitude*.—Champagne Cider Syrup:—

Essence of pineapple	..	..	..	3j.
Essence of jargonelle	..	..	..	3ss.
Spirit of nitrous ether	..	..	..	3ij.
Acetic acid	..	..	..	iv.
Caramel	..	..	..	q.s.
Syrup to	..	..	..	1 gallon.

Mix. One ounce of this to each bottle of aërated water.

218/15. *W. F. W.*—Tricopherous:—

Castor oil	..	..	..	1 pint.
Alcohol	..	..	..	1 "
Tincture of cantharides	..	..	..	1 oz.
Essence of bergamot	..	..	..	3i.

Colour with alkanet. Allow to stand for two days and filter.

216/69. *F. W. G.*—Carbon Terechloride (C_2Cl_6) is a white crystalline substance, insoluble in water, but soluble in alcohol and ether. It was originally prepared by exposing Dutch liquid in an atmosphere of chlorine to the influence of sunlight; but, as a derivative of ethane, is now made by more workable processes.

211/22. *E. C. V.* sends a sample of Starch Polish used largely by bleachers and finishers of handkerchiefs in Ireland. It is a white paste with a strong odour of ammonia. We find that it consists of lard, wax, glycerine and ammonia, with a little perfume. The following formula will make a similar preparation:—

Lard	..	..	..	..	3vij.
White wax	..	..	..	..	3ss.
Glycerine	..	..	..	..	3ss.
Strong solution of ammonia	..	..	..	..	3j.
Citronella oil	..	..	..	..	5 drops

Melt the wax and lard together and stir constantly until of a creamy consistence, then add the perfume, and incorporate the glycerine and ammonia previously mixed.

216/9. *Enquirer* (Leicester).—The oil-proof compound is composed of shellac, ammonia, and borax. Try the following:—

Shellac	..	..	..	..	1 oz.
Borax	..	..	..	..	½ "
Solution of ammonia	..	..	..	..	2 "
Water	..	..	..	..	q.s.

Dissolve the borax in 3 oz. of water and the ammonia solution; in this digest the shellac until dissolved, and bring to a suitable consistence with water.

217/62. *X. Y. Z.* sends a curious and inelegant composition for smearing over cornice-moulds, so that the castings may come out without breaking. The ingredients of the compound which we can make out with any certainty are a heavy paraffin or lubricating oil, and the rough powder of a very common gum benzoin.

214/31. *Dubious*.—We have tried the **Marking-ink Pen-cil**, and our results do not justify us in condemning it. We may say, however, that the composition of the mordant is different from one by the same makers which we recently examined. The mordant which you send is a mixture of sulphate of copper and nitrate of potash, but that examined recently was chloride of ammonium. We find, too, that your pencil consists chiefly of nigrosin. It is badly made, but there is a workable idea in the combination.

220/9. *A. Burns*.—**Liquor [Elixir] Acidi Halleri** is a mixture of equal parts by weight of sulphuric acid and rectified spirit. They should, of course, be very gradually mixed, the acid being poured into the spirit.

Books.

210/74. *Salambo*.—**Sanitation**.—Your friend should read Slater's "Sewage Treatment, Purification, and Utilization" (Whitaker & Co., 6s.). This is a newly-published work.

211/15. *Soda*.—We do not know the composition of the pills.

211/19. *P. V.* makes *Milk of Roses* from the following formula:—

Blanched almonds	2 oz.
Glycerine	4 "
Distilled water.. .. .	6 "
White wax	3j.
Spermaeti	5j.
Powdered white soap.. .. .	5j.
Otto of rose	q.s.

The almonds are beaten up in a mortar, and to the paste is added very gradually the mixture of wax, soap, and spermaeti, previously heated with 1½ oz. of water; then the perfume and the rest of the glycerine and water.

The objections to it are that it gradually becomes of a yellow colour and of a putrid odour; but if "P. V." tries the addition of 2 drachms of borax and ½ oz. of eau de Cologne instead of as much glycerine, he will find a distinct improvement. The borax should be added to the wax mixture.

212/19. *C. E. L.*—The "Art of Pharmacy" is out of print, but you might get a copy through the Exchange column.

214/17. *Dublin*.—See page 409, also page 725, for lavender salts.

214/68. *Poultry* asks if the following can be improved upon:—

Poultry Food to Make Hens Lay during Winter.

Powdered eggshell or phosphate of lime ..	3iv.
Sulphate of iron.. .. .	3iv.
Powdered capsicum	3iv.
Powdered fenugreek	3ij.
Powdered black pepper	5j.
Silver sand	3ij.
Powdered lentils or powdered dog bisenit ..	3vi.

M. Sig.—A tablespoonful to be mixed with sufficient meal or porridge to feed twenty hens.

215/70. *Aquosa*.—The following is a satisfactory formula for a preparation similar to *Liquor Opi Sedativus*:—

Opium (10 per cent.)	2 oz.
Slaked lime (purified)	2 drachms
Rectified spirit	5 oz.
Finest sherry	1 "
Water	q.s.

Boil the opium (in small pieces) with the lime and 15 oz. water for half an hour, then allow to cool. Make up to 14 oz. with water, add the spirit and sherry, and set aside for a week; filter, press the marc, and add proof spirit to make 20 fluid oz. Set aside for six months, to allow the liquor to "improve."

215/51. *Boracis* (Sheffield) does not give particulars of the use of the liquid which he sends, and does not give his name. When these are received his query will be attended to.

212/8. *W. T.*—*Angostura Bitters*:—

Angostura bark	4 oz.
Camomile flowers	1 "
Cardamom seeds	½ "
Cinnamon	1 "
Raisins	1 lb.
Rectified spirit	6 pints
Water	14 "

Macerate for a month, press and filter.

212/32. *Dick Deadeye*.—Evidently it is the ordinary ingredients for *Cochineal Colouring* which were used for re-dyeing the stains on red cloth. Oxalic acid is used in solution to remove dark stains.

212/46. *Acid Tart.*—You should give particulars of the method which you used.

216/47. *Nepenthe*.—To Powder *Asafoetida*.—In *THE CHEMIST AND DRUGGIST* of April, 1863, Mr. Barnard S. Proctor states that "the friability of this class of bodies is much increased by the addition of a small proportion of calcined magnesia, so much so that they may be readily powdered at ordinary temperatures; and the powder, when obtained, has not that great tendency to agglomerate which is so troublesome in *asafoetida*, &c. Several samples of these gums upon which I have experimented have required from 4 to 10 per cent. of magnesia to produce the requisite degree of brittleness. The gums may be softened by water-bath heat, and the magnesia stirred in; when sufficiently mixed, and allowed to cool, they may be readily powdered. The powder thus obtained has the full odour of the pure drug."

218/2. *A Subscriber*.—(1) *Ruspini's Styptic*.—Tannic acid, 5 parts; brandy, 10 parts; rose water, 120 parts. Dissolve the tannic acid in the brandy, and add the rose water. (2) To remove the odour of fish from cutlery, use a little soap powder in boiling water. (3) The black deposit in your solution of bismuth may be either tellurium or bismuth sulphide; but this you can only tell by examining it chemically. (4) You will find a formula for photograph-mounting mucilage on page 333 of the current volume.

217/38. *Neurotic*.—See page 688 for *Indian Cerate* formula.

DISPENSING NOTES.

[The opinion of practical readers is invited on subjects discussed under this heading.]

A Large Pill.

SIR.—What is the best method of dispensing the following prescription?

Ferri redact.	gr. iss.
Zinci valerian.	gr. iij.
Ext. nucis vom.	gr. ½
" belladon.	gr. ¼
Quin. sulph.	gr. j.

M. Ft. pil. Mitte xxiv.

Yours faithfully,
MALADROIT. (218/20.)

A Soap Ointment.

SIR.—In the following prescription what would be the proper soap to use in order to send it out of a suitable consistency:—

Potass. iodid.	3ij.
Saponis	3ij.

M. Ft. unguent.

I am, sir, yours truly,
J. H. C. (218/66.)

[Dissolve the iodide in its own weight of water, and make the solution of a suitable consistency with powdered soap, then make up to the proper weight with soft soap.]

An Impracticable Formula.

I had the following prescription to make up this evening:—

Tinct. benz. eo.	3j.
Aqua ad	3ij.

3j. on boiling water to be inhaled.

I put 2 oz. of water into the bottle, and added 1 oz. of the tincture with shaking, but after letting it stand a few minutes it formed quite a crust, which I could not get rid of. So I put a "Shake the bottle" label on, and sent it to the patient. What should I have done? Was it a mistake of the prescriber?

Yours, &c.,
ASSISTANT. (219/50.)

[If there was anything which "Assistant" should not

have done, it was to send the mixture out in the form that he did. If, in such a case, the prescriber cannot be consulted, the dispenser should give the tincture only, making the necessary alteration in the directions; or rectified spirit may be used instead of water; but the former method is preferable.]

Solutions in Pills.

SIR,—I find the pills make up as written, with the addition only of 12 grains of pulv. altheæ. I do not know ext. gent. co., but use pulv. ext. gent. (Southall).

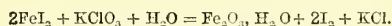
Yours truly,
HEDER.

Ferrous Iodide and Potassium Chlorate.

SIR,—Can you tell me what is the deposit which soon forms in the following mixture:—Pot. chlor. gr. x.; syr. ferri iodid. ʒj.; aq. ad ʒj.

Yours faithfully,
W. H. G. (216/66.)

[The decomposition which takes place is peculiar to ferrous iodide. Potassium iodide and potassium chlorate, for example, do not react in the same way. The prime mover in the reaction is the ferrous atom, which has a greater affinity for the oxygen of the potassium chlorate than the chlorine or potassium has; hence, within an hour after the above mixture is compounded it begins to darken in colour, and to acquire the odour of iodine. Later, there is a perceptible deposit. The reaction was investigated some years ago by Mr. R. H. Parker. He showed that the precipitate is ferric oxide, and he gave the following as the probable reaction:—



He also showed that the more chlorate there is present the quicker is decomposition completed.

This reply also applies to "A. W. D. (217/60)" and other correspondents who have sent communications regarding a similar prescription.]

A Foreign Remedy.

Ol. hyoscyam.	..	..	..	..	60 grm.
Land. Syd.	..	..	..	..	2 "
Chloroformi	..	..	..	..	3 "
M. Ft. liniment.	Ut. ext.	..	..	..

Dispenser (220/20) would be glad to know how to dispense this, and what the first two ingredients are, and how to make. It is a Brussels physician's prescription.

[Ol. hyoscyam. is made by digesting together 4 parts of dried henbane leaves, 3 parts of rectified spirit, and 40 parts of olive oil in a water-bath, and stirring until the spirit is driven off; then press and filter. The second ingredient of the prescription is laudanum Sydenhami, the tinctura opii crocata of the German Pharmacopœia. Its component parts are powdered opium, 30; saffron, 10; cloves, 2; cinnamon, 2; proof spirit, 300. All by weight.]

LEGAL QUERIES.

62/216. *Inquirer* asks "if there is any reason why a chemist and druggist should not commence business as a homœopathic chemist." [There is no legal objection to his doing so.]

35/219. *Cymro* asks "if it is absolutely necessary or compulsory for a registered chemist, when he leaves one town for another, to inform the secretary of the Pharmaceutical Society of such change. If he does not, what is the consequence?" [There is no compulsion; but persons who cannot be found when the biennial rectification of the register is made will be struck off.]

25/220. *Chimie*.—There is a paragraph on page 260 of the DIARY which answers your questions categorically. Registration at Stationers' Hall affords no protection, and if your trade-mark is registrable you can make it legally maintainable only by registering it at the trade-marks office.

70/218. *M.*—It is illegal for an unregistered person to "take, use, or exhibit" the title of "chemist." Therefore we should say that if such a person exhibit the title, "A. B. (from C. D., chemist), grocery and drug stores," he renders himself liable to a penalty. Information of such a proceeding should be sent to the secretary of the Pharmaceutical Society.

54/218. *J. S. C.*—The statement you quote from the *Grocer* is quite correct. The sale of patent medicines by unregistered persons is expressly permitted by the Pharmacy Act, though the regulations in regard to labelling such of these as contain poison apply to grocers as well as to chemists.

68/218. *Pure Pharmacy* writes:—"I have bought a shop the fixtures and contents of which had been seized under sheriff's warrant. Amongst fixtures there were two automatic cigarette machines. The Automatic Cigarette Machine Company have applied for them to be given up, stating that they were only lent. Am I obliged to give them up, and can I recover from vendor? or can I refuse their application, and what would be the probable result of so doing?" [There appears to have been some negligence on the part of the company in not claiming the articles in question before they were sold to you. However, as such things are notoriously lent to tradesmen, it would have been better if you had inquired whose property they were before paying for them along with the other fixtures. But you cannot derive a good title thereto from a person who had no right to sell them, and you had better endeavour to arrange with the vendor, who ought to return you a portion of what you paid, without any litigation being necessary. We understand that they were valued to you, and the price thereof included in the valuation.]

68/216. *Peak Forest* says: "he commenced business in March, 1887. Three weeks afterwards he was called upon to make returns of income. He replied, 'Been in business three weeks; not making expenses.' This month (December) he is assessed at 150*l.*, and charged on 30*l.* On appealing to commissioners he is told he must pay, and if, after being in business twelve months, he finds he has not made 150*l.* profit, he may then apply for amount to be refunded. He wants to know, can he be compelled to pay the charge? [It is rather too bad; but if the assessment has been completed and handed to the collector he has no alternative, but must collect from you the amount chargeable against you in respect of such assessment. But we do not understand why, if this be so, you have already been applied to, because the income-tax for the year ending April 5, 1888, will not become payable until January. If what you have received is the notice of assessment, you ought to be allowed to appeal on giving due notice of your intention to do so, as explained at the foot of the notice. If the money should have to be paid, you could, at the end of the year's trading, apply to the local commissioners for a certificate to enable you to obtain the amount back from the Commissioners of Inland Revenue. The practice in this respect is altogether different from that under schedule A (rents, &c.)]

Information Wanted.

[Replies to the following requests are solicited by correspondents of THE CHEMIST AND DRUGGIST.]

216/50. Address of maker of willow hoops, such as are put around 1-cwt. casks.

220/30. Composition of Clark's hoplemuroma.

218/2. What is the best printing-machine for a chemist?

217/38. Formula for Swan's mixture.

215/5. Composition of Cole's ossidine.

217/28. Country customer asks for some liquid preparation for sprinkling or watering field sown with grain, to keep crows off. It does not poison the birds, but simply drives them away by its taste or smell.

206/10. Formula for lin. plumbi lactatis co.